

Overview 0 Cabinets 1

Systems

| Wall | m | 0 | u | n | te | 9 | d | | |
|------|---|---|---|---|----|---|---|---|---|
| case | S | | | | - | - | - | - | 2 |

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

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Systems

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AdvancedTCA systems 8.2



AdvancedMC carriers 8.26 MicroTCA 8.36 **AdvancedMC** modules 8.56 CompactPCI... 8.68 VME-, VME64x-, VXS-, VPX-bus . 8.88 **System** accessories Backplanes/ bridges 10.0 Guide rails 6.38 Plug-in units with extractor handle 7.18 Air baffles 6.61 Mezzanine front panels ... 7.12 **Fan Control** Modules (FCM) 8.106 Chassis monitoring modules (CMM) 8.107 19" power supplies 9.0 Equipment cables 3.38 **Drive unit** modules 8.108

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Overview 0

Cabinets 1

Wall mounted cases 2

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Appendix 12

Systems - AdvancedTCA



12707010

Everything a system needs.

Schroff's AdvancedTCA systems make the development of new, forward-looking telecommunications installations with high data-processing rates as simple for you as possible.

We offer everything on the basis of the AdvancedTCA specification that you have come to expect from a Schroff complete system

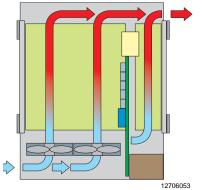
Excellent mechanics, optimised cooling, reliable power supply, efficient data distribution and secure system management.

But that is not all:

As a matter of course, our complete systems are also available in shock and vibration-resistant versions with UL certification.

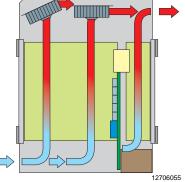
With Schroff, AdvancedTCA means matured products and wide ranges of options:

- Dimensions from 2 to 14 U
- 2 to 16 slot installations
- Cooling concepts (push, pull, push-pull)
- Backplane topologies (dual star, full mesh)
- Shelf manager based on Pigeon Point technology



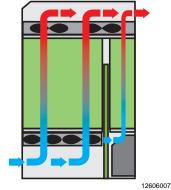
Push cooling

The fans are situated near the air inlet and push the air through the system.



Pull cooling

The fans are situated near the air outlet and suck the air through the system.



Push-Pull

The fans are situated below and above the board cage for maximum airflow and optimal redundancy.



Downloads and further important information can be found on the Internet under www.a-tca.com and www.schroff.biz

Overview 8.2

Systems and components available world-wide

■ Very wide product range with regard to dimensions, number of slots, cooling designs, backplane topologies and shelf managers; all completely assembled and tested



- NEBS ready, UL recognized
- For mounting in ETSI, 19" or 23" cabinets
- Cooling up to 400 W per board





12705006 12705005

AdvancedTCA systems

- 2 ... 14 U; 2 ... 16 slot
- Backplane with dual star, full mesh topology, 15-fold connected fabric interface with hub/hub or node/node configuration; bussed or radial IPMB
- Push, pull or push-pull cooling
- Shelf manager based on Pigeon Point technology

Front panels and handles



AdvancedTCA accessories

- Shelf manager based on Pigeon Point technology
- Backplane



ServicePLUS from page 8.112

e.g. individual configuration and assembly

e.g. modifications (integration)

e.g. downloads (CAD drawings, user manuals, test reports)

e.g. custom solutions

www.schroff.biz/ServicePLUS

Systems

2 U, 2 slot DC version, without rear I/O. 8.4

with rear I/O 8.5

5 U, 6 slot 8.6 12 U, 14 slot 8.7 13 U, 14 slot 8.8

13 U, 16 slot, 96 HP 8.9

14 U, 14 slot, next generation . 8.10

Accessories... 8.11

Field replaceable units (FRUs) .. 8.20

ServicePLUS.. 8.112

Main Catalogue E 10/2012



Front view

| | _ | |
|--|---|--|
| 15 | | |
| 14 | | |
| 17 | | |
| 13 | | |
| 12 | | |
| 11 | | |
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| 4 | | |
| 3 | | |

Node/node configuration



ServicePLUS see page 8.112

12612050

2 U, 2 slot, without rear I/O

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 3.0
- Perfect configuration for a move to AdvancedTCA
- 2 slot backplane, 15x connected fabric interface, node/node configuration
- Two hot-swap fan trays for up to 200 W cooling per slot, airflow from right to left (push-pull cooling)
- Power terminal with fuse (PEM) -48 V_{DC}
- No shelf manager is required

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" subrack, St, zinc-plated, 2 U, 84 HP, 382 mm deep, front with overlays, black, RAL 9005, with 2 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards |
| 2 | 1 | Backplane, 2 slot, 15x connected fabric interface, with node/node configuration (base channels are connected) |
| 3 | 1 | Power terminal with fuse (PEM) -48 V _{DC} |
| 4 | 2 | Fan tray |
| 5 | 1 | Air filter |

Order Information

| AdvancedTCA system | Backplane type | Part no. |
|----------------------------------|--|-----------|
| 2 U, 2 slot, without rear I/O | 15x connected fabric interface, node/node configuration, bussed IPMB | 11596-088 |
| Accessories | | |
| PSU, AC/DC, 850 W/500 | W (230 V/115 V) 1 piece | 21596-370 |
| Front panels and handle | es | Page 8.12 |
| AdvancedMC carriers | | Page 8.26 |
| Replacement parts (F | RUs) | |
| Air filters - page 8.23 | | 21596-515 |
| | | |

Note

■ Modified systems available on request





Front view

Node/node configuration

Hub/hub configuration



ServicePLUS see page 8.112

2 U, 2 slot, with rear I/O

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 3.0
- Perfect configuration for a move to AdvancedTCA
- 2 slot backplane, 15x connected fabric interface; two versions: Node/node or hub/hub configuration
- Two hot-swap fan trays for up to 200 W cooling per slot, airflow from right to left (push/pull cooling)
- One power terminal with fuse (PEM) -48 V_{DC}
- Two shelf managers and one SAP (shelf alarm panel) may be fitted

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" subrack, St, zinc-plated, 2 U, 84 HP, 382 mm deep, Front with overlays, black, RAL 9005, with 2 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards, rear 8 U, 6 HP, 70 mm deep |
| 2 | 1 | Backplane, 2 slot, 15x connected fabric interface; node/node configuration: base channels are connected hub/hub configuration: base channel 1 cross connected to the shelf managers, base channels 2-15 are connected directly to one another |
| 3 | 1 | Power terminal with fuse (PEM) -48 V _{DC} |
| 4 | 2 | Fan tray |
| 5 | 1 | Air filter |

Order Information

| AdvancedTCA system | Backplane type | Part no. | |
|---|--|-----------|--|
| 2 U, 2 slot, | 15x connected fabric interface with hub/hub configuration, bussed IPMB | 11596-090 | |
| with rear I/O | 15x connected fabric interface with node/node configuration, bussed IPMB | 11596-107 | |
| Accessories | | | |
| Shelf manager | 21596-300 | | |
| Front panels an | Page 8.12 | | |
| AdvancedMC c | Page 8.26 | | |
| Replacement parts (FRUs) | | | |
| Shelf alarm pan | 21596-077 | | |
| PSU, AC/DC, 85 Chassis, height input 90 264 \ output 48 V _{DC} , 1 1 piece | 21596-370 | | |
| Equipment cable | Page 3.38 | | |
| Air filter - page | 8.23 | 21596-515 | |





Front view



ServicePLUS see page 8.112

5 U, 6 slot, with PEM

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 3.0
- 6 slot backplane with triple replicated mesh topology, 40 Gbps transmission rate (4 x 10 Gbps), radial or bussed IPMB with inserted FRU SEEPROM
- Two hot-swap fan trays (with 6 fans each) for over 350 W cooling per slot, airflow from right to left (push-pull cooling)
- Two redundant power entry modules (PEMs) for supply voltage -48 V_{DC}/-60 V_{DC}
- Power distribution to backplane via two redundant power branches, separately protected by 30 A circuit breakers
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 and one shelf alarm panel (SAP)



Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" subrack system, St, zinc-plated, 5 U, 84 HP, 464 mm deep, front with overlays, black, RAL 9005, with 6 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards, rear 8 U, 6 HP, 70 mm deep |
| 2 | 1 | Backplane, 6 slot, triple replicated mesh, 2 hub slots, 4 node slots |
| 3 | 2 | Redundant -48 V_{DC} /-60 V_{DC} power entry module (PEM) with circuit breaker |
| 4 | 2 | Hot-swap fan tray with 6 fans each to cool the boards (> 350 W/board); filter mat |
| 5 | 2 | Front panel; space to accommodate shelf manager |
| 6 | 1 | Front panel; space for fitting shelf alarm panel (SAP) |

Order Information

| AdvancedTCA system | Backplane type | Part no. | |
|--------------------|--|-----------|--|
| 5 U, 6 slot, | Triple replicated mesh, 40 Gbps, bussed IPMB | 11596-160 | |
| with PEM | Triple replicated mesh, 40 Gbps, radial IPMB | 11596-161 | |
| Accessories | | | |
| Shelf manager | (bussed) 1 piece - page 8.18 | 21596-300 | |
| Shelf manager | (radial) 1 piece - page 8.18 | 21596-301 | |
| Cable RJ 45 Ca | 23204-187 | | |
| 1 piece; page 8.18 | | | |
| Front panels ar | Page 8.12 | | |
| AdvancedMC of | Page 8.26 | | |
| Replacement | parts (FRUs) | | |
| Power entry me | odule (PEM) - page 8.20 | 21990-058 | |
| Fuse 30 A/80 V | 21191-207 | | |
| Shelf alarm par | 21596-077 | | |
| Fan tray - page | 21990-057 | | |
| Air filter - page | 8.23 | 21990-059 | |

Note

■ Modified systems available on request





Front view



ServicePLUS see page 8.112

12 U, 14 slot, with PEM

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 2.0
- 14 slot backplane with dual star or full mesh topology
- Two redundant power entry modules (PEM) for supply voltage -48 V_{DC}/-60 V_{DC}
- Redundant hot-swap fan trays for up to 250 W cooling per slot, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB topology



Delivery comprises (completely assembled, wired and tested)

| ltem | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" subrack system, St, 12 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; with 14 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards, rear 8 U, 6 HP, 70 mm deep; cable channel at front and rear |
| 2 | 1 | Backplane, 14 slot |
| 3 | 2 | Redundant -48 V_{DC} /-60 V_{DC} power entry module (PEM), plugged in on the rear, with 4 pairs of lines each per input (8 fuses, 30 A) |
| 4 | 1 | Fan unit at bottom; 3 redundant fan trays with 330 m ³ /h (195 cfm) each, with 2 fans each to cool the front and rear I/O boards Filter mat |
| 5 | 1 | Shelf alarm panel (SAP) |
| 6 | 1 | Cover for shelf manager slot (enclosed loose) |
| 7 | 2 | Mounting bracket, for assembly in 19" cabinets |

Order Information

| AdvancedTCA system | Backplane type | Part no. | | |
|---|---------------------------------|-----------|--|--|
| 12 U, 14 slot, | Dual star, 25 Gbps, bussed IPMB | 11596-300 | | |
| with PEM | Full mesh, 25 Gbps, radial IPMB | 11596-303 | | |
| Accessories | | | | |
| Shelf manager (b | ussed) 1 piece - page 8.18 | 21596-300 | | |
| Shelf manager (ra | adial) 1 piece - page 8.18 | 21596-301 | | |
| Cable RJ 45 Cat s 1 piece; page 8.18 | 23204-187 | | | |
| Adaptor 12 U RAI | 21596-273 | | | |
| Adaptor 12 U RAI | 21596-274 | | | |
| Front panels and | Page 8.12 | | | |
| AdvancedMC car | riers | Page 8.26 | | |
| Replacement pa | arts (FRUs) | | | |
| Chassis Data Mo | dule - page 8.25 | 21596-023 | | |
| Power entry mod | ule (PEM) - page 8.20 | 21596-003 | | |
| Fuse 30 A/80 V fo | 21191-207 | | | |
| Shelf alarm panel | 21596-022 | | | |
| Fan tray - page 8 | 21596-236 | | | |
| Air filter - page 8 | Air filter - page 8.23 | | | |
| · | · | · | | |

Note

■ Modified systems available on request



Front view



ServicePLUS see page 8.112

13 U, 14 slot, with PEM

- In accordance with AdvancedTCA Standard PICMG 3.0 Rev.3.0
- 14 slot backplane with dual star topology (bussed or radial IPMI, 40 Gbps) or with full mesh topology, radial IPMI (25 Gbps)
- \blacksquare Two redundant power entry modules (PEM) for supply voltage -48 $\rm V_{DC}/\text{-}60~V_{DC}$
- Redundant hot-swap fan trays for up to 300 W cooling per slot, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP) and shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB





Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" subrack system, St, 13 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; front 14 slot, 8 U, vertical board mounting, boards 6 HP, 280 mm deep, rear 6 HP, 70 mm deep; cable channel at front and rear |
| 2 | 1 | Backplane, 14 slot |
| 3 | 2 | Redundant power entry module (PEM), -48 V_{DC} /-60 V_{DC} , plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A) |
| 4 | 1 | Fan unit at top; 3 redundant fan trays with 400 m ³ /h (230 cfm) each, with 2 fans each to cool the front and rear I/O boards; filter mat |
| 5 | 1 | Shelf alarm panel (SAP) |
| 6 | 1 | Shelf alarm display (SAD) |
| 7 | 2 | Mounting bracket, for assembly in 19" cabinets |

Order Information

| 13 U, 14 slot, with PEM Dual star, 40 Gbps, bussed IPMB 11990-600 | AdvancedTCA | Backplane type | Part no. |
|---|---------------------|---------------------------------|-----------|
| 13 U, 14 slot, with PEM Dual star, 40 Gbps, bussed IPMB 11990-601 Full mesh, 25 Gbps, radial IPMB 11990-603 Accessories Shelf manager (bussed) 1 piece - page 8.18 21596-300 Shelf manager (radial) 1 piece - page 8.18 21596-301 Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18 Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit 21596-278 | system | | |
| with PEM | 12 II 14 alat | Dual star, 40 Gbps, bussed IPMB | 11990-600 |
| Full mesh, 25 Gbps, radial IPMB 11990-603 Accessories Shelf manager (bussed) 1 piece - page 8.18 21596-300 Shelf manager (radial) 1 piece - page 8.18 21596-301 Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18 Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit 21596-278 | | Dual star, 40 Gbps, bussed IPMB | 11990-601 |
| Shelf manager (bussed) 1 piece - page 8.18 21596-300 Shelf manager (radial) 1 piece - page 8.18 21596-301 Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18 23204-187 Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit 21596-278 | WIGHT LIVI | Full mesh, 25 Gbps, radial IPMB | 11990-603 |
| Shelf manager (radial) 1 piece - page 8.18 21596-301 Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18 23204-187 Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit 21596-278 | Accessories | | |
| Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18 23204-187 Mounting bracket 13 U RAL 9005, from 19" to 23", 21596-278 | Shelf manager (k | oussed) 1 piece - page 8.18 | 21596-300 |
| 1 piece; page 8.18 Mounting bracket 13 U RAL 9005, from 19" to 23", PU 1 kit 23204-187 23204-187 | Shelf manager (r | adial) 1 piece - page 8.18 | 21596-301 |
| PU 1 kit 21596-278 | | 23204-187 | |
| Front penals and handles | • | 21596-278 | |
| Front panels and nandles Page 8.12 | Front panels and | Page 8.12 | |
| AdvancedMC carriers Page 8.26 | AdvancedMC car | Page 8.26 | |
| Replacement parts (FRUs) | Replacement p | arts (FRUs) | |
| Chassis Data Module - page 8.25 21596-023 | Chassis Data Mo | dule - page 8.25 | 21596-023 |
| Power entry module (PEM) - page 8.21 21596-020 | Power entry mod | dule (PEM) - page 8.21 | 21596-020 |
| Fuse 30 A/80 V for power entry module, PU 10 pieces 21191-207 | Fuse 30 A/80 V fo | 21191-207 | |
| Shelf alarm panel (SAP) - page 8.24 21596-140 | Shelf alarm pane | 21596-140 | |
| Shelf alarm display (SAD) - page 8.24 21596-026 | Shelf alarm disp | 21596-026 | |
| Fan tray - page 8.22 21990-184 | Fan tray - page 8 | 21990-184 | |
| Air filter - page 8.23 21596-138 | Air filter - page 8 | 3.23 | 21596-138 |

Note

■ Modified systems available on request



Front view



ServicePLUS see page 8.112

13 U, 16 slot, 96 HP, with PEM

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 2.0
- 16 slot backplane with dual star or full mesh topology
- \blacksquare Two redundant power entry modules (PEM) for supply voltage -48 $\rm V_{DC}/\text{-}60~V_{DC}$
- Redundant hot-swap fan trays for up to 300 W cooling per slot, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP); Shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB topology



Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" subrack system, St, 13 U, 96 HP, 383 mm deep, powder-coated, black, RAL 9005; with 16 horizontal slots for 8 U, 6 HP, 280 mm deept AdvancedTCA boards, rear 6 HP, 70 mm deep; cable channel at front and rear |
| 2 | 1 | Backplane, 16 slots |
| 3 | 2 | Redundant -48 V_{DC} /-60 V_{DC} power entry module (PEM), plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A) |
| 4 | 1 | Fan unit at top; 3 redundant fan trays with 390 m ³ /h (230 cfm) each, with 2 radial fans each to cool the front and rear I/O boards; filter mat |
| 5 | 1 | Shelf alarm panel (SAP) |
| 6 | 1 | Shelf alarm display (SAD) |
| 7 | 2 | Mounting bracket, for assembly in ETSI racks |

Order Information

| Oraci illiorillati | | | | | |
|---------------------------------------|---------------------------------------|-----------|--|--|--|
| AdvancedTCA system | Backplane type | Part no. | | | |
| 13 U, 16 slot, | Dual star, 40 Gbps, bussed IPMB | 11592-500 | | | |
| 96 HP, with PEM | Full mesh, 25 Gbps, radial IPMB | 11592-503 | | | |
| Accessories | | | | | |
| Shelf manager (bu | ssed) 1 piece - page 8.18 | 21596-300 | | | |
| Shelf manager (rad | dial) 1 piece - page 8.18 | 21596-301 | | | |
| Cable Cat 5 plug - 1 piece; page 8.18 | D-Sub plug, 9-pin, length 2 m, | 23204-187 | | | |
| Mounting bracket RAL 9005, from ET | 21596-327 | | | | |
| Front panels and h | Page 8.12 | | | | |
| AdvancedMC carri | ier | Page 8.26 | | | |
| Replacement pa | rts (FRUs) | | | | |
| Chassis Data Mod | ule - page 8.25 | 21596-023 | | | |
| Power entry modu | le (PEM) - page 8.21 | 21596-020 | | | |
| Fuse 30 A/80 V for | power entry module, PU 10 pieces | 21191-207 | | | |
| Shelf alarm panel | Shelf alarm panel (SAP) - page 8.24 | | | | |
| Shelf alarm display | Shelf alarm display (SAD) - page 8.24 | | | | |
| Fan tray | | 21596-025 | | | |
| Air filter - page 8.2 | 23 | 21594-144 | | | |

Note

■ Modified systems available on request

AdvancedTCA 450/40 series chassis, 14 slot, DC

- 40 G backplane with 14 slots, dual star topology, 2 versions: bussed and radial IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC}/-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration, airflow from bottom front to top rear; air filter exchangeable from front
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB topology
- UL recognized, E229721 type T08
- Conforms to AdvancedTCA standard PICMG 3.0 Rev.3.0



Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear |
| 2 | 1 | Backplane, 14 slots |
| 3 | 2 | Redundant power entry module (PEM) -40 \dots -72 V_{DC} , inserted at rear, with 2 pairs of lines per input |
| 4 | 1 | Fan tray at top with 6 fans, each 565 m ³ /h (336 cfm) |
| 5 | 1 | Fan tray at bottom with 6 fans, each 565 m ³ /h (336 cfm) |
| 6 | 1 | Telco alarm panel integrated in the bottom fan drawer |
| 7 | 1 | Air filter, can be changed from the front |
| 8 | 2 | Mounting bracket, for assembly in 19" cabinets |

Order Information

| AdvancedTCA | Backplane type | Part no. | | | | |
|----------------------------|-------------------------------------|-----------|--|--|--|--|
| system | | | | | | |
| AdvancedTCA 450/40 | Dual star, 40 Gbps, bussed IPMB | 11990-100 | | | | |
| series chassis, 14 slot, | Buai star, 40 Obps, bussed if MB | 11770-100 | | | | |
| DC | Dual star, 40 Gbps, radial IPMB | 11990-101 | | | | |
| Accessories | | | | | | |
| Shelf manager (buss | ed) 1 piece - page 8.18 | 21596-300 | | | | |
| Shelf manager (radia | I) 1 piece - page 8.18 | 21596-301 | | | | |
| Cable RJ 45 Cat 5 plu | ıg - D-Sub plug, 9-pin, length 2 m, | 22224427 | | | | |
| 1 piece; page 8.18 | | 23204-187 | | | | |
| Front panels and han | Page 8.12 | | | | | |
| AdvancedMC carriers | Page 8.26 | | | | | |
| Replacement parts (FRUs) | | | | | | |
| Chassis Data Module | - page 8.25 | 21990-226 | | | | |
| Power entry module | 21990-224 | | | | | |
| Fuse 30 A/80 V for por | 21990-225 | | | | | |
| F 4 0.00 | | 21990-227 | | | | |
| Fan tray - page 8.23 | | 21990-228 | | | | |
| Air filter - page 8.23 | 21990-229 | | | | | |

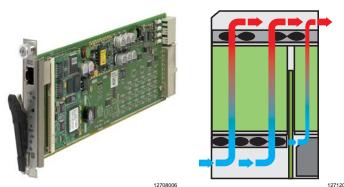
■ Modified systems available on request



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



Front view



Accessories: optional shelf manager

Push-pull cooling



ServicePLUS see page 8.112



Accessories overview

- Front panel reinforced with die-cast end piece and IEA handle with spring loading, see from page 8.12

 - KitIndividual configuration
- Front panel and IEA handle without spring loading, see from page 8.14
 - Kit
 - Individual configuration (Al or stainless steel) with/without spring loading
- AdvancedTCA front panels with integrated side two cover, see page 8.16
- AdvancedTCA air deflectors, filler panels, see page 8.17
- Shelf managers, see page 8.18
- Backplanes, see page 8.19
- Replacement parts field replacement units (FRUs), see from page 8.20

Front panel reinforced with die-cast end piece and IEA handle with spring loading

- Schroff hot-swap handle (when open, the spring loading aids the complete opening of the handle and thus facilitates the insertion of the board)
- Front panel: aluminum or stainless steel, reinforced by the diecast end piece (increases robustness of front panel)
- Versions for 2 microswitch types (plunger or lever contact)
- EMC textile gasket

Delivery comprises (Kit)

| | • | • • • |
|------|-----|--|
| Item | Qty | Description |
| 1 | 1 | Front panel |
| 3 | 2 | Die-cast endpiece, alignment pin, knurled screws M3 |
| 2 | 1 | Lower IEA handle incl. bearing, spring assisted, (pre-fitted as transport securing device) |
| 4 | 1 | Upper IEA handle incl. bearing, spring-assisted, (pre-fitted as transport securing device) |
| 5 | 1 | EMC gasket, length 299 mm |
| 6 | 1 | Fixing material kit and user manual |

Order Information

| Stainless steel, with AdvancedTCA IEA handle (plunger type) | 20818-160 |
|---|---|
| ILA Haridio (pidrigor type) | |
| Stainless steel, with AdvancedTCA IEA handle (lever type) | 20818-161 |
| Al extrusion, 1 mm, with AdvancedTCA IEA handle (plunger style) | 20818-169 |
| Al extrusion, 1 mm, with AdvancedTCA IEA handle (lever style) | 20818-170 |
| es | Al extrusion, 1 mm, with AdvancedTCA IEA handle (plunger style) Al extrusion, 1 mm, with AdvancedTCA IEA handle (lever style) |

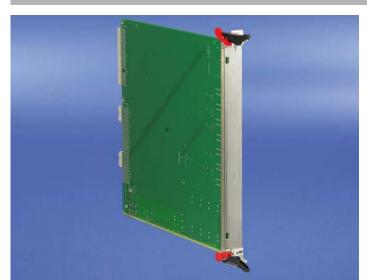
AdvancedTCA handle (IEA) design element Plastic, transparent, to clip on, for customers' logos, 20818-140 UL 94 V-0, PU 10 pcs

Note

- Front panels with copper-beryllium gasket (CuBe) available on request
- Front panels with board cover on request
- With its front panel service Schroff offers extensive modification options, including custom cut-outs, foils and screen printing, www.frontpanelexpress.eu
- Intuitive Ergonomic Aesthetic = IEA handle
- CAD data: please enter part number under www.schroff.biz/oneclick/



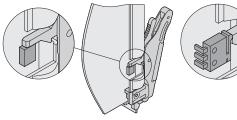




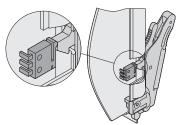
Delivery excludes board



AdvancedTCA spring-loaded IEA handle



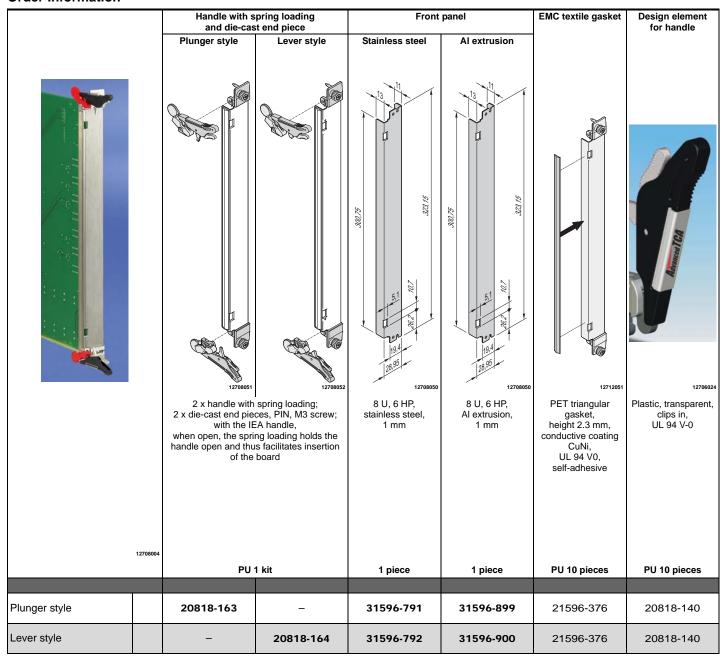
Handle with plunger contact (plunger style)



Handle with lever contact (lever style)

Configuration: Front panel reinforced with die-cast end piece and IEA handle with spring loading

Order Information



Note

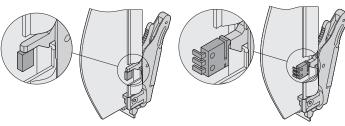
■ Intuitive Ergonomic Aesthetic = IEA handle



Left: application example; right: scope of delivery without board



AdvancedTCA IEA handle



Handle with plunger contact (plunger style)

Handle with lever contact (lever style)

Front panels and IEA handle (without spring loading)

- Schroff hot-swap handle (when open, the handle must be held in the open position)
- Stainless steel front panel
- Versions for 2 microswitch types (plunger or lever contact)
- EMC textile gasket

Delivery comprises ((kit))

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Stainless steel or Al extrusion front panel incl. alignment pin and M3 knurled screws |
| 2 | 1 | Lower handle incl. bearing |
| 3 | 1 | Upper handle incl. bearing |
| 4 | 1 | EMC mesh gasket |
| 5 | 1 | Fixing material kit (M2.5 screws incl. thread locking compound) |

Order Information

| Height U | Width HP | Front panels and IEA handle (without spring loading) | Part no. | | |
|-------------|-------------|---|-----------|--|--|
| 8 | 6 | Stainless steel, with AdvancedTCA IEA handle (plunger type) | 21596-324 | | |
| 8 | 6 | Stainless steel, with AdvancedTCA IEA handle (lever type) | 21596-325 | | |
| Accessories | | | | | |

AdvancedTCA handle (IEA) design element

20818-140 Plastic, transparent, to clip on, for customers' logos, UL 94 V-0, PU 10 pcs

Note

- Al front panel available through individual configuration service
- Front panels with copper-beryllium gasket (CuBe) available on request
- Front panels with board cover on request
- With its front panel service Schroff offers extensive modification options, including custom cut-outs, foils and screen printing: www.frontpanelexpress.eu
- Intuitive Ergonomic Aesthetic = IEA handle
- CAD data: please enter part number under www.schroff.biz/oneclick/

FRONT PANEL

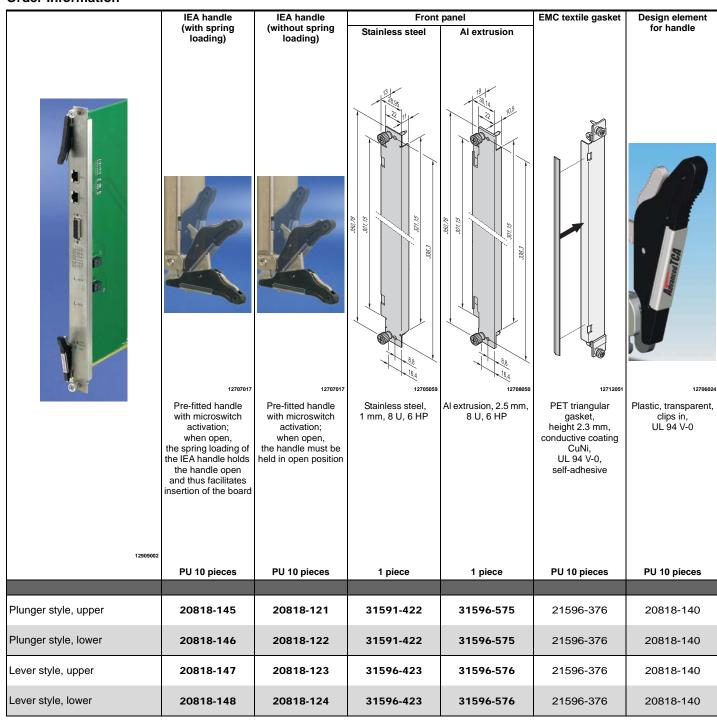
EXPRESS



12707017

Front panels and IEA handle (with/without spring loading)

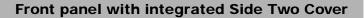
Order Information



Note

■ Intuitive Ergonomic Aesthetic = IEA handle

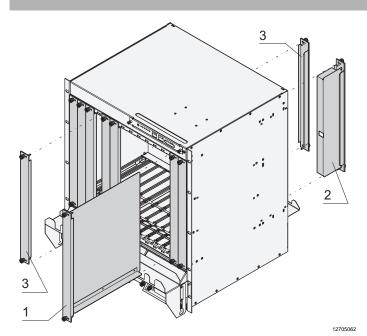


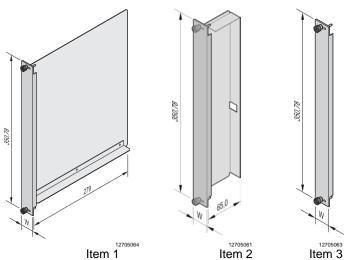




- For protection of components on solder side of backplane
- Customised version available on request
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, <u>www.frontpanelexpress.eu</u>

FRONT PANEL EXPRESS





AdvancedTCA air deflectors, filler panels

- Front panels, stainless steel or Al extrusion
- 6 HP front panels in three versions
- Front: Front panel with air baffle
- (item 1, air baffle blocks the air from unused slots)
- Rear: Front panel with air baffle
- (item 2, air baffle blocks the air from unused slots)
- Only front panel (item 3)

Delivery comprises (Kit)

| Item | Qty | Description |
|------|-----|----------------------------|
| 1 | 1 | Front panel |
| 2 | 1 | Air baffle (front or rear) |

Order Information

AdvancedTCA air deflector

| Item | Height U | Width HP | Depth mm | W mm | Description | Part no. |
|------|-------------|-------------|-------------|---------|--|-----------|
| 1 | 8 | 6 | 280 | 30.14 | Front panel, Al extrusion, incl. air baffle, with mesh gasket | 21596-008 |
| 1 | 8 | 6 | 280 | 28.95 | Front panel, stainless steel, incl. air baffle with mesh gasket | 21591-079 |
| 2 | 8 | 6 | 70 | 30.14 | Front panel, Al extrusion, for rear I/O area, incl. air baffle, with mesh gasket | 21591-107 |
| 2 | 8 | 6 | 70 | 28.95 | Front panel, stainless steel, for rear I/O area, incl. air baffle with mesh gasket | 21591-099 |

AdvancedTCA filler panel

| Item | Height U | Width HP | Depth mm | W mm | Description | Part no. |
|------|-------------|-------------|-------------|---------|--|-----------|
| 3 | 8 | 6 | - | 30.14 | Al extrusion, front panel with mesh gasket | 21591-104 |
| 3 | 8 | 6 | _ | 28.95 | Front panel, stainless steel, with mesh gasket | 21591-097 |

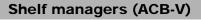
Note

- Version with CuBe gasket available on request
- AdvancedMC carriers see page 8.26
- CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>









- Based on Pigeon Point Shelf Management technology **ShMM 500**
- Up to two Shelf Managers per system can be used per system
- Includes stainless steel front panel and AdvancedTCA handle

Order Information

| Height | Width | Depth | Description | Part no. | | | |
|--------------------|--|-------|-------------------------------|-----------|--|--|--|
| U | mm | mm | | | | | |
| 2 | 20.00 | 280 | Shelf manager, bussed version | 21596-300 | | | |
| 2 | 2 20.00 280 Shelf manager, radial version | | | | | | |
| Cable I 1 piece | Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece 23204-187 | | | | | | |
| shelf ma | Front panel, stainless steel to cover an unused shelf manager slot, width 15.22 mm, height 99.33 mm, 21596-012 incl. EMC gasket, 1 piece | | | | | | |

■ Shelf manager to Intel NetStructure[®] MPCMM0002 (chassis management module) available on request



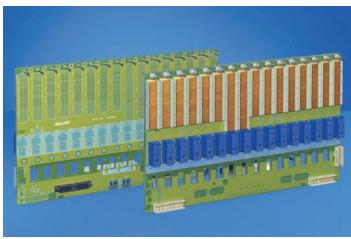
For further information www.schroff.biz/oneclick oneClick search code = Part no.



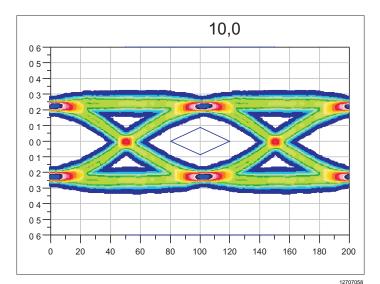
Cable

Front panel, stainless steel

12706052



12606003



Backplane

All Schroff AdvancedTCA systems are equipped with a high-performance Schroff backplane. Thanks to our years of experience in high-speed data transfer we have now built 40G backplanes to the XAUI specification into our systems, which are constructed with the low-cost FR 4 material. Additionally, the number of layers has been reduced to less than half of the first backplanes. The Schroff AdvancedTCA systems are equipped and available with:

- Backplane with dual star, full mesh and replicated mesh topology; dual dual star topology on request
- Bussed or radial intelligent platform management interface (IPMB)
- Redundant power supply, divided into up to four independent segments
- Point-to-point connection structure independent of protocol
- Data transfer rates of up to 40 Gbps
- I²C bus for internal monitoring
- Outstanding eye pattern of up to 10 Gbps per differential pair (40G backplane)

Field replaceable units (FRUs)

Field replaceable unit (FRU) designates system components that can be replaced on site. This reduces system downtime to a minimum. Schroff offers various FRU components for AdvancedTCA systems:

- Power entry modules, see from page 8.20
- Fan trays, see from page 8.21
- Air filters see page 8.23
- Shelf alarm panels, see from page 8.23
- Shelf alarm display, see page 8.24
- Chassis data module, see page 8.25

Power entry module for 5 U, 6 slot AdvancedTCA system



- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- \blacksquare For 2 pairs of lines each (RTN and -48 $V_{DC}\!/\text{-}60~V_{DC}\!)$ per input
- Delivers up to 350 W/slot
- Hot-swap push-button and LED display (hot-swap, alarms, etc.)
- 2 circuit breakers and 2 double lugs (power terminals)

Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Power entry module 6-slot system (11596-160, 11596-161) | 1 | 21990-058 |

Note

- CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>
- AdvancedTCA systems see from page 8.6

12710002

Power entry module for 12 U, 14 slot AdvancedTCA system



- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- \blacksquare For 4 pairs of lines each (RTN and -48 $V_{DC}\!/\!\text{-}60~V_{DC})$ per input
- 8 fuses 30 A/80 V each

Order Information

| Description | Qty/PU | Part no. |
|--|-------------|-----------|
| Power entry module for 12 U, 14 slot AdvancedTCA system (11596-300, -303) | 1 | 21596-003 |
| Fuse 30 A/80 V for power entry module, PL | J 10 pieces | 21191-207 |

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.9



Power entry module for 13 U, 14/16 slot AdvancedTCA system

- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- For 4 pairs of lines each (RTN and -48 V_{DC}/-60 V_{DC}) per input
- 8 fuses 30 A/80 V each

Order Information

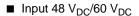
| Description | Qty/PU | Part no. |
|--|--------------|-----------|
| Power entry module for 13 U, | | |
| 14/16 slot AdvancedTCA system | 1 | 21596-020 |
| (11990-600, -601, -603; 11592-500, -503) | | |
| Fuse 30 A/80 V for power entry module, | PU 10 pieces | 21191-207 |

Note

12706006

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9

Power entry module for 14 U, 14-slot AdvancedTCA system



- Plugged-in at rear of chassis
- For 2 pairs of lines each (RTN and -48 V_{DC}/60 V_{DC}) per input
- 8 fuses 50 A/80 V each



Order Information

| Description | Qty/PU | Part no. |
|------------------------------------|------------------|-----------|
| Power entry module for 14 U, | | |
| 14-slot AdvancedTCA system | 1 | 21990-224 |
| (11990-10x) | | |
| Accessories | | |
| Fuse50 A/80 V for power entry modu | le, PU 10 pieces | 21990-225 |



Fan tray for 5 U, 6 slot AdvancedTCA system



- Cooling capacity up to 350 W per board
- Extractor handle, hot-swap push-button and LED display (hot-swap, alarms, etc.)

Order Information

| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Fan tray for 5 U, 6-slot system (11596-160, 11596-161) | 1 | 21990-057 |

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.6



Fan tray for 12 U, 14 slot AdvancedTCA system

- Fan tray with 2 fans (330 m³/h = 195 cfm each) to cool front and rear boards in system
- Extractor handle and LED display (hot-swap, alarms, etc.)

Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Fan tray 12 U, 14 slot system (11596-3xx) | 1 | 21596-236 |

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.7



Fan tray for 13 U, 14 slot AdvancedTCA system

- Fan tray with 3 radial fans $(300 \text{ m}^3/\text{h} = 175 \text{ cfm})$ to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)

Order Information

| Description | Qty/PU | Part no. |
|--------------------------------------|--------|-----------|
| Fan tray 14-slot systems (11990-60x) | 1 | 21990-184 |

- AdvancedTCA systems see page 8.8
- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/



12706009

Upper fan tray for 14 U, 14-slot AdvancedTCA system

- Fan tray with 6 axial fans (570 m³/h = 336 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front





| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Upper fan tray for 14 U, 14-slot systems (11990-10x) | 1 | 21990-227 |



Lower fan tray for 14 U, 14-slot (11990-10x)

- Fan tray with 6 axial fans (570 $\text{m}^3/\text{h} = 336 \text{ cfm}$) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front



Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Lower fan tray for 14 U, 14-slot systems (11990-10x) | 1 | 21990-228 |



12712002

Air filters for AdvancedTCA systems

- 45 PPE, 80 % dust collection to NEBS GR-78 Core standard
- Material Polyurethan UL 94 HF1

Order Information

| Air filter | Qty/PU | Part no. |
|--|--------|-----------|
| for 2 U, 2 slot systems (11596-088, 11596-090, 11596-107) | 1 | 21596-515 |
| for 5 U, 6 slot systems (11596-16x) | 1 | 21990-059 |
| for 13 U, 16 slot systems (11592-50x) | 1 | 21594-144 |
| for 14 U, 14 slot system (11990-10x) | 1 | 21990-229 |

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9

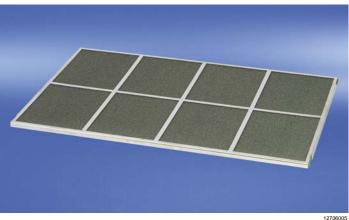


Photo shows air filter of 14 slot system

Shelf alarm panel for 12 U, 14 slot AdvancedTCA system

- Displays all alarm signals in accordance with AdvancedTCA specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)
- D-Sub plug for Telco alarm



| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Shelf alarm panel for 12 U, 14 slot systems (11592-40x, 11596-30x) | 1 | 21596-022 |

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.7



Upper fan tray for 14 U, 14-slot (11990-10x)

- Fan tray with 6 axial fans (570 m³/h = 336 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front



Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Lower fan tray for 14 U, 14-slot systems (11990-10x) | 1 | 21990-228 |



12712002

Air filters for AdvancedTCA systems

- 45 PPE, 80 % dust collection to NEBS GR-78 Core standard
- Material Polyurethan UL 94 HF1

Order Information

| Air filter | Qty/PU | Part no. |
|--|--------|-----------|
| for 2 U, 2 slot systems (11596-088, 11596-090, 11596-107) | 1 | 21596-515 |
| for 5 U, 6 slot systems (11596-16x) | 1 | 21990-059 |
| for 13 U, 16 slot systems (11592-50x) | 1 | 21594-144 |
| for 14 U, 14 slot system (11990-10x) | 1 | 21990-229 |

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9

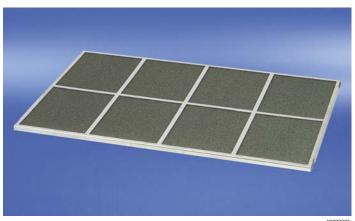


Photo shows air filter of 14 slot system

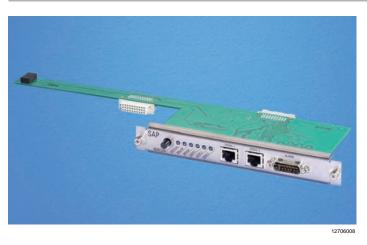
Shelf alarm panel for 12 U, 14 slot AdvancedTCA system

- Displays all alarm signals in accordance with AdvancedTCA specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)
- D-Sub plug for Telco alarm



| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Shelf alarm panel for 12 U, 14 slot systems (11592-40x, 11596-30x) | 1 | 21596-022 |

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.7



Shelf alarm panel for 13 U, 14 slot AdvancedTCA system

- For output of all Telco alarm signals in accordance with AdvancedTCA Specification
- D-Sub socket for Telco alarm

Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Shelf alarm panel for 13 U, 14 slot systems (11596-10x) | 1 | 21596-140 |

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.8



4

Shelf alarm panel for 13 U, 16 slot AdvancedTCA system

- For output of all Telco alarm signals in accordance with AdvancedTCA specification
- D-Sub socket for Telco alarm

Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Shelf alarm panel for 13 U, 16 slot systems (11592-50x) | 1 | 21596-025 |

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.9



12706010

Shelf alarm display for 13 U, 14 and 16 slot AdvancedTCA system



- Display the Telco and fan tray alarm signals in accordance with AdvancedTCA Specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)

Order Information

| Description | Qty/PU | Part no. |
|----------------------------------|--------|-----------|
| Shelf alarm display | | |
| for 13 U, 14 and 16 slot systems | 1 | 21596-026 |
| (11592-5xx, 11596-1xx) | | |

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.9

Chassis data module for 12, 13 and 14 U AdvancedTCA systems SEEDBOM for chassis ERU data (user must appointed by

- SEEPROM for chassis FRU data (user must specifically programm it for the chassis)
- Temperature sensors for input temperature of chassis
- Hall sensor for filter mat ("air filter present")

Order Information

| Chassis data module | Qty/PU | Part no. |
|---|--------|-----------|
| for systems 11592-50x, 11596-30x, 11596-60x | 1 | 21596-023 |
| for systems 11990-10x | 1 | 21990-226 |

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9



Illustration shows chassis data module 21596-023

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

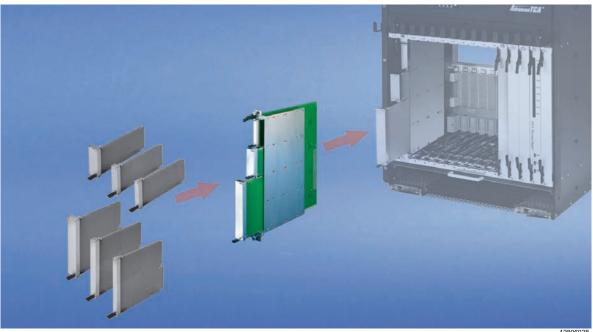
Systems 8



Backplanes .. 10

Connectors, front panel component system 11

Systems - AdvancedMC carriers



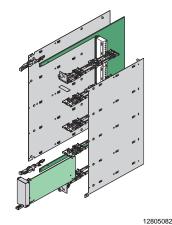
12806028

AdvancedMC carriers

AdvancedMC carriers are plug-in units that are slotted into an AdvancedTCA system. They contain the carrier board that accepts AdvancedMC modules.

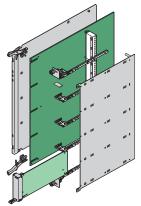
Electrical connection to the AdvancedTCA backplane is via connectors. With the fully-assembled AdvancedMC carrier in place, cost-effective additional functions may be integrated into the system.

The standard, in accordance with PICMG specification AMC.0 R2.0, defines three different mechanical versions:



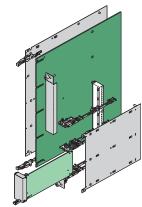
Cutaway carrier

- Carrier board is cut out in the area of the AdvancedMC modules
- Max. placement:
 8 single compact or 4 single full-size AdvancedMC modules
- Combinations of full-size and compact modules are possible



Conventional carrier

- Carrier board runs continuously from front to rear
- Max. placement:
 4 single compact or 4 single
 mid-size AdvancedMC modules



12805081

Hybrid carrier

12805083

- Carrier board is a combination of conventional and cutaway carrier
- The maximum placement depends on the carrier board design
- Combinations of all AdvancedMC modules are possible





Downloads and further important information can be found on the Internet under www.schroff.biz

Systems - AdvancedMC carriers

AdvancedMC carriers for AdvancedTCA systems

- Cutaway, conventional and hybrid carrier mechanics for
 - compact AdvancedMC carrier boards
 - Mid-size AdvancedMC carrier boards
 - Full-size AdvancedMC carrier boards
- Standard versions from stock
- Individual carrier/module combination of your choice

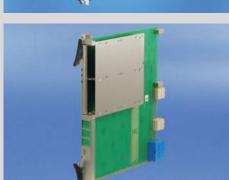


AdvancedMC carriers

- 1 slot chassis, 8 U, 6 HP for AdvancedTCA systems
- Inserter/extractor handle for microswitch activation
- Versions
 - Cutaway carrier for compact and full-size modules
 - Conventional carrier for mid-size and compact modules

Individual solutions on request

- AdvancedMC hybrid carrier
- AdvancedMC hybrid mechanics for rugged AdvancedMC modules (MicroTCA.1)



12812005 12806016



Cutaway carriers For compact and full-

size modules

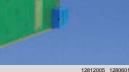
Overview 8.26

. Microswitches .. 8.31 **Differences**

between standard and MF handles for AMC carriers 8.31

Conventional carriers

For mid-size and compact modules Complete kits ... 8.32 With Southco AdvancedTCA handle 8.32 With AdvancedTCA IEA handle 8.33 Guide rails/struts Microswitches . . 8.34



ServicePLUS from page 8.35

e.g. individual configuration and fitting of hybrid carriers)

e.g. modifications (cut-outs, special colours)

e.g. custom solutions (special sizes)

www.schroff.biz/ServicePLUS



ServicePLUS . . 8.35

ServicePLUS configuration Hybrid carrier . . 8.35

Main Catalogue E 10/2012



14 4 13 8 6 9 10 13 2 11 13 7 5 3



Carrier mechanics for compact and full-size AdvancedMC modules

- Mechanics for cutaway carrier board (carrier with 3 different struts, guide rails, ESD clips)
- Stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- Inserter/extractor handle, designed for microswitch activation hot-swap)

Delivery comprises (Kit)

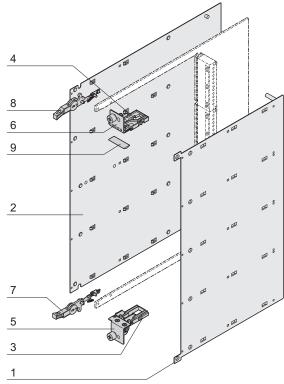
| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 2 | 1 | Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 3 | 1 | Lower splitting extrusion (strut), Zn die-cast, nickel-plated |
| 4 | 1 | Upper splitting extrusion (strut), Zn die-cast, nickel-plated |
| 5 | 1 | Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in |
| 6 | 1 | Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in, with holes for LEDs |
| 7 | 1 | Standard inserter/extractor handle, with microswitch operation, plastic lever, black |
| 8 | 1 | Standard inserter/extractor handle, plastic lever, black |
| 9 | 1 | EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating |
| 10 | 3 | Support member between cover A and B |
| 11 | 3 | Support member for cover A (on the left) |
| 12 | 3 | Support member for cover B (on the right) |
| 13 | 8 | ESD clip |
| 14 | 10 | AdvancedMC guide rail, PBT, UL 94 V-0, red |
| 15 | 1 | Assembly kit |

Order Information

| Description | Part no. |
|--|-----------|
| Carrier mechanics for AdvancedMC compact and full-size modules with struts, ESD clips and guide rails | 10849-001 |
| Accessories | |
| Microswitch, normally closed, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces | 20849-236 |
| Microswitch, normally open, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces | 20849-235 |
| Description inserter/extractor handle | Page 8.31 |
| Microswitch description | Page 8.31 |
| AdvancedMC module mechanics | Page 8.56 |









Carrier mechanics for compact and full-size AdvancedMC modules

- Mechanics for cutaway carrier board (carrier without struts, guide rails, ESD clips, for individual placement)
- Stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- Inserter/extractor handle, designed for microswitch activation (hot-swap)

Delivery comprises (Kit)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 2 | 1 | Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 3 | 1 | Lower splitting extrusion (strut), Zn die-cast, nickel-plated |
| 4 | 1 | Upper splitting extrusion (strut), Zn die-cast, nickel-plated |
| 5 | 1 | Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in |
| 6 | 1 | Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in, with holes for LEDs |
| 7 | 1 | Standard inserter/extractor handle, with microswitch operation, plastic lever, black |
| 8 | 1 | Standard inserter/extractor handle, plastic lever, black |
| 9 | 1 | EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating |
| 10 | 1 | Assembly kit |

Order Information

| Description | Part no. |
|--|-----------|
| Carrier mechanics for AdvancedMC compact and full-size modules without struts, ESD clips and guide rails | 10849-002 |
| Accessories | |
| Microswitch, normally closed, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces | 20849-236 |
| Microswitch, normally open, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces | 20849-235 |
| Further struts, ESD clips and guide rails | Page 8.30 |
| Description inserter/extractor handle | Page 8.31 |
| Microswitch description | Page 8.31 |
| AdvancedMC module mechanics | Page 8.56 |
| | |



4 15 4 35

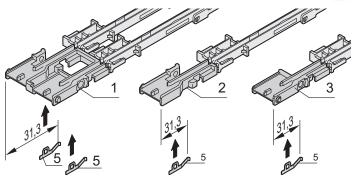
Board guides/struts for AdvancedMC compact and full-size modules

- Struts and guide rails are always required to guide boards
- 3 different struts
 - The strut is assembled between the cover plates A and B
 - The strut is assembled on the left of cover plate A
 - The strut is assembled on the right of cover plate B
- The ESD clip pushes into the strut (one per board guide)
- The guide rails clip into the cover plate

for soldering (SMD), PU 10 pieces - page 8.31

Order Information

| Item | Description | Qty/PU | Part no. |
|--|--|--------|-----------|
| 1 | Strut between cover A (left) and B (right), Zn die-cast, nickel-plated | 10 | 20849-009 |
| 2 | Splitting extrusion (strut) for cover A (left), Zn die-cast, nickel-plated | 10 | 20849-010 |
| 3 | Splitting extrusion (strut) for cover B (on the right), Zn die-cast, nickel-plated | 10 | 20849-011 |
| 4 | AdvancedMC guide rail, PBT, UL 94 V-0, red | 10 | 20849-008 |
| 5 | ESD clip, stainless spring steel, for deflection of electrostatic charges | 50 | 20849-021 |
| Acces | ssories | | |
| Microswitch, normally closed, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces, page 8.31 20849-23 | | | |
| Microswitch, normally open, for AdvancedMC carrier (compact and full-size modules) 20849-23 | | | |





For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



Main Catalogue

E 10/2012

Microswitch for carrier (compact and full-size AdvancedMC modules)

■ Microswitch for soldering (SMD)

Order Information

Technical data

| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Microswitch, normally closed , for AdvancedMC carrier (compact and full-size modules) | 10 | 20849-236 |
| Microswitch, normally open , for AdvancedMC carrier (compact and full-size modules) | 10 | 20849-235 |

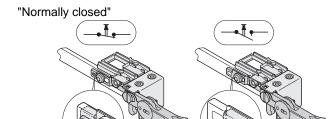
12807081

12806063

| Max. switch current | 1 mA, 5 V _{DC} |
|-----------------------|----------------------------------|
| Operating temperature | -15 °C +70 °C |
| Electrical lifespan | 10 ⁵ switching cycles |



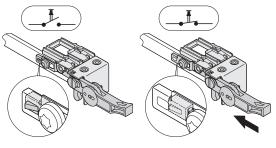
For further information www.schroff.biz/oneclick oneClick search code = Part no.



Handle in inoperative position

Handle activated

Closer

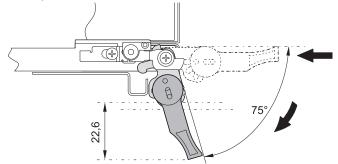


Handle in inoperative position

Handle activated

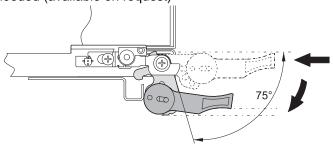
Differences between standard and MF handle for AdvancedMC carrier (compact and full-size modules)

Standard front handle - is included in delivery of carriers for compact and full-size modules



- Extractor handle 75° opening angle
- Insertion/extraction in one step
- Swing range: 23 mm below and above the pitch line
- Included in delivery of carrier

MF handle - can be exchanged by standard handle if needed (available on request)



12805072

- Extractor handle 75° opening angle
- Insertion/extraction in three steps (2 operations)
- Small swing range (0 mm) below and above the pitch line. The lower respectively upper limit of the carrier is not exceeded during extraction.

Systems - AdvancedMC conventional carrier

Carrier mechanism for mid-size AdvancedMC modules with AdvancedTCA Southco handle, complete kit

- Mechanics for conventional carrier, stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- AdvancedTCA Southco inserter/extractor handle, designed for microswitch activation (hot-swap)
- Carrier mechanics with struts and guide rails for four modules

Delivery comprises (Kit)

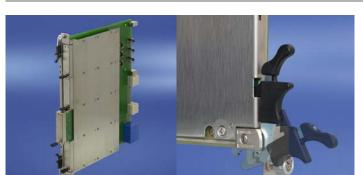
| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 2 | 1 | Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 3 | 1 | Lower splitting extrusion (strut), Zn die-cast, nickel-plated |
| 4 | 1 | Upper splitting extrusion (strut), Zn die-cast, nickel-plated |
| 5 | 1 | Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in |
| 6 | 1 | Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in |
| 7 | 1 | Lower AdvancedTCA Southco inserter/extractor handle, with microswitch activation, lever plastic, black |
| 8 | 1 | Upper AdvancedTCA Southco inserter/extractor handle, with microswitch activation, lever plastic, black |
| 9 | 1 | EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating |
| 10 | 1 | EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating |
| 11 | 3 | Splitting extrusion between covers A and B (4 ESD clips) |
| 12 | 5 | AdvancedMC guide rail, PBT, UL 94 V-0, green |
| 13 | 1 | Fixing material kit |

Order Information

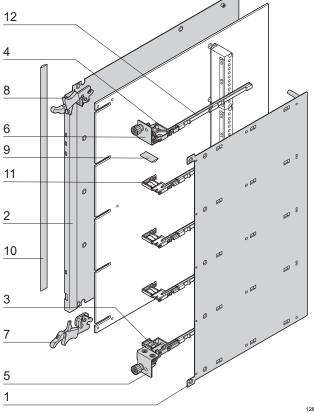
| Description | Part no. |
|---|-----------|
| AdvancedMC carrier mechanism for mid-size AdvancedMC modules with Southco AdvancedTCA IEA handle with struts, ESD clips and guide rails | 10849-009 |
| Accessories | |
| Microswitch for carriers (mid-size AdvancedMC modules) normally closed, for soldering (SMD), PU 10 pieces - Page 8.34 | 20817-853 |
| Microswitch for carriers (mid-size AdvancedMC modules) normally open, for soldering (SMD), PU 10 pieces - Page 8.34 | 20817-909 |
| AdvancedMC module mechanics | Page 8.56 |

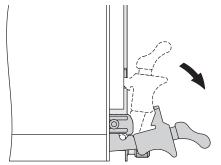
Note

- Carrier with stronger cover plate A (1 mm) on request
- Carrier for compact AdvancedMC modules on request
- Southco type handle kit on request



12808003 128080





ServicePLUS see page 8.35



Systems - AdvancedMC conventional carrier

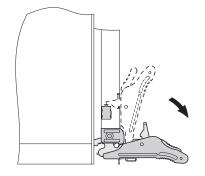


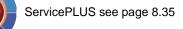
Carrier mechanism for mid-size AdvancedMC modules with AdvancedTCA IEA handle, complete kit

- Mechanics for conventional carrier, stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- AdvancedTCA IEA inserter/extractor handle, designed for microswitch activation (hot-swap)
- Carrier mechanics with struts and guide rails for four modules

Delivery comprises (Kit)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 2 | 1 | Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film |
| 3 | 1 | Lower splitting extrusion (strut), Zn die-cast, nickel-plated |
| 4 | 1 | Upper splitting extrusion (strut), Zn die-cast, nickel-plated |
| 5 | 1 | Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in |
| 6 | 1 | Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in |
| 7 | 1 | Lower AdvancedTCA IEA inserter/extractor handle, with microswitch activation, plastic lever, black |
| 8 | 1 | AdvancedTCA IEA inserter/extractor handle, top, with microswitch activation, lever plastic, black |
| 9 | 1 | EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating |
| 10 | 1 | EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating |
| 11 | 3 | Splitting extrusion between covers A and B (4 ESD clips) |
| 12 | 5 | AdvancedMC guide rail, PBT, UL 94 V-0, green |
| 13 | 1 | Fixing material kit |





Order Information

| Description | Part no. |
|--|-----------|
| AdvancedMC carrier mechanism for mid-size | |
| AdvancedMC modules with | 10849-011 |
| AdvancedTCA IEA handle with struts, | 10047-011 |
| ESD clips and guide rails | |
| Accessories | |
| Microswitch for carriers (mid-size AdvancedMC | |
| modules) normally closed, for soldering (SMD), | 20817-853 |
| PU 10 pieces | |
| Microswitch for carriers (mid-size AdvancedMC | |
| modules) normally open, for soldering (SMD), | 20817-909 |
| PU 10 pieces | |
| AdvancedMC module mechanics | Page 8.56 |
| · | |

Note

- Carrier with stronger cover plate A (1 mm) on request
- Carrier for compact AdvancedMC modules on request
- Southco type handle kit on request



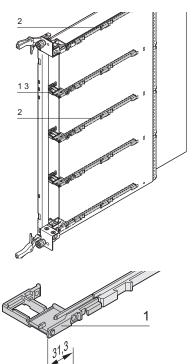
For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

12

4

5 1

Systems - AdvancedMC conventional carrier



Board guides/struts for AdvancedMC mid-size modules

- Struts and guide rails are always required to guide boards
- Strut is assembled between cover plates A and B
- The ESD clip pushes into the strut (one per board guide)
- The guide rails clip into the cover plate

Order Information

| Item | Description | Qty/PU | Part no. |
|------|---|--------|-----------|
| 1 | Strut between cover A (left) and B (right), Zn die-cast, nickel-plated | 10 | 20849-242 |
| 2 | AdvancedMC guide rail for mid-size carrier, PBT, UL 94 V-0, green | 10 | 20849-166 |
| 3 | ESD clip, stainless spring steel, for deflection of electrostatic charges | 50 | 20849-021 |



For further information www.schroff.biz/oneclick oneClick search code = Part no.

12806062

Microswitch for carriers (mid-size AdvancedMC modules)

- Microswitch for soldering (SMD)
- Can be used for all conventional carrier handles

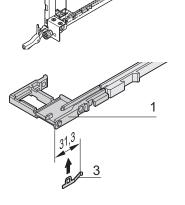
Order Information

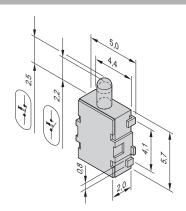
| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Microswitch (normally closed) for carrier (mid-size AdvancedMC modules) | 10 | 20817-853 |
| Microswitch (normally open) for carrier (mid-size AdvancedMC modules) | 10 | 20817-909 |

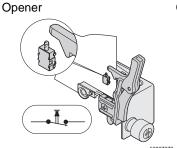
Technical data

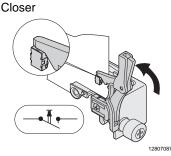
| Max. switch current | 100 mA, 12 V _{DC} |
|-----------------------|--------------------------------------|
| Operating temperature | -20 °C +60 °C |
| Electrical lifespan | 5 x 10 ⁵ switching cycles |











Systems - AdvancedMC carrier ServicePLUS



modification

Custom drillings, cut-outs and special colours for off-the-shelf products

Small changes. Large impact.

- Mechanical modifications
- Ready to send within 10 working days



solution

Integration and custom developments

Simple. Fast. From one source.

■ Customised complete solutions

ServicePLUS: solution



AdvancedMC carrier mechanics

- The carrier board is a combination of conventional and cutaway carriers
- Max. placement depends on the design of the carrier board
- Custom versions on request
 - Single/double combinations
 - Handles
 - AdvancedTCA IEA
 - AdvancedTCA Southco

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component

Systems - MicroTCA



12907003

MicroTCA (Micro **Telecommunications Computing Architecture)**

MicroTCA.0 R1.0 is a modular standard that utilises AdvancedMC modules. These are plugged directly onto the backplane.

In addition to standard systems, modifications and customised solutions, Schroff also offers all components for building systems.

The central unit of a MicroTCA system is the MicroTCA carrier hub (MCH), which performs the carrier and often also shelf management. It also acts as the data switch in the system.

Carrier and shelf management include, among other things, temperature, voltage and air monitoring.

Remote monitoring can be set up via an external Ethernet connection. This allows early detection and remedying of temperature problems. Downtimes are thus reduced.

Applications

Reduced development costs and shorter time-to-market are the advantages of the MicroTCA standard compared to proprietary system solutions, as they can be found increasingly often in telecommunications today.

Among others the advantages over the previous bus systems (VME, CompactPCI busses) are the higher speed, smaller designs and larger flexibility.

MicroTCA is used in areas where faster data transfer rates are required and large data volumes must be processed in the shortest time, e.g. in telecommunications, automation, image processing, medical systems, defence systems

Heat dissipation

MicroTCA defines very high heat dissipation for the AdvancedMC modules.

The maximum heat dissipation for the largest module (double full-size) is determined as 80 W. Cooling is thus a challenge.

MicroTCA systems from Schroff can reliably dissipate this volume of thermal power loss. Special fans have been purpose-developed and create a particularly high static pressure.

In addition, thermal simulations and measurements are performed on Schroff MicroTCA systems to optimise the airflow.

system 11



Downloads and further important information can be found on the Internet under www.schroff.biz

Appendix 12

Main Catalogue E 10/2012

Modular MicroTCA high speed systems

■ Very wide product range in terms of dimensions, number of slots, cooling principles, backplane topologies



- Modifications to your requests
- Systems for MicroTCA.0, MicroTCA.1 and MicroTCA.4



MicroTCA.4 systems for test and measurement applications

- Cube and 19" systems
- For double mid-size AMC modules
- With rear board cage for rear transition modules
- Cooling units with management controller



MicroTCA.1 systems for industrial applications

- Cube systems
- For double mid-size AdvancedMC modules
- For harsh environmental conditions
- Cooling units with management controller



MicroTCA.0 systems for communications applications

- Cube and 19" systems
- For single and double AdvancedMC modules
- Cooling units with management controller



MicroTCA.0 systems for laboratory applications

- Desk-top enclosures with tip-up feet
- Cube and 19" systems
- Cooling units without management controller



ServicePLUS from page 8.112

e.g. individual configuration and assembly e.g. modifications (backplanes, power supply)

e.g. ventilation concepts

e.g. custom solutions

www.schroff.biz/ServicePLUS

| MicroTCA.1 systems for industrial applications |
|--|
| Cube, 5 U, 42 HP, for 6 single modules 8.40 |
| MicroTCA.0 systems for communications applications |
| Cube, 5 U, 30 HP, for 4 single modules 8.41 |
| 1 U, for 6 single modules 8.42 |

Overview 8.36

MicroTCA.4 systems

for test and

for 7 double

measurement applications

Cube, 5 U, 42 HP,

9 U, for 12 double

modules 8.38

modules 8.39

| MicroTCA.0 | |
|--------------|----|
| case systems | fo |
| laboratory | |
| applications | |

Cube 3 II 30 HP

3 U, for 10 single

6 U, for 9 single modules 8.45

modules 8.43 4 U, for 12 single

modules 8.44

| for 4 single modules | 8.4 |
|----------------------|-----|
| 3 U vertical, for | |

| 3 | U ve | rtıcal | , tor | |
|---|------|--------|-------|-----|
| 4 | sing | le mo | dules | 8.4 |
| | | | | |

| Accessories | |
|---------------|------|
| Splitting kit | 8.48 |

| Guide rails | 8.49 |
|-------------------------|------|
| Power feeder nodules | 8.50 |
| lower cumply | 0.00 |

| Power supply systems | 8.51 |
|----------------------|------|
| Field replaceable | |
| units (FRUs) | 8.53 |

ServicePLUS..8.112

Main Catalogue E 10/2012

8.37

12912001

MicroTCA.4 system, cube, 5 U, 42 HP, for 7 double AdvancedMC modules

- In accordance with PICMG MTCA.4 R1.0 specification
- 5 U, 42 HP cube system for 6 double mid-size and 1 double full-size AdvancedMC modules, 1 double full-size MCH and 1 double full-size power module
- 6 rear transition module slots for double mid-size modules and one slot for double full-size
- Backplane with star topology, direct connections for S-ATA/SAS, clock and trigger lines as per PICMG MTCA.4
- Clock topology to PICMG AMC.0 R2.0
- Hot-swap fan module with cooling unit manager (CU EMMC), airflow from bottom to top, fan speed for front and rear sections can be separately adjusted via MCH
- Air filter, exchangeable from front



Front view



Rear view

| | | 4 | 3 | 2 | 1 | AMC1 | AMC2 | AMC3 | AMC4 | AMC5 | AMC6 | AMC7 | Port | |
|------------------|--|-----|---|---------|------|------|------|------|---|------|---------------------------------------|---------------------------------------|----------------------------|---------------------------------|
| ns | MCH1 Fabric [A] to AMC Port 0 | | | | | | | | | | | | 0 | provi |
| Common Options | MCH1 Fabric [A] to AMC Port 1 | | | | 1233 | | | | | | ī | | 1 | 1GbE |
| Comm | AMC Port 2 AMC Port 3 | | | | | • | | | | • | 0 | • | 2 | SAS/ SATA |
| Fat Pipe | MCH1 Fabric [D:G] to AMC Port [4:7] | 7 + | 0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | | | E-P- | 4/2 | 477 | 1/> | 4/> | J. | 7 | 4 5 6 7 | PCle |
| Ext. Fat Pipe | | | | | | | | | | | | | 8 9 10 | 1GbE SRIO |
| otions | | | | | | | | | • | | • | • | 12 13 14 15 | Point 2-poin links |
| Extended Options | | | | | | 000 | • • | •• | • | 00 | • • • • • • • • • • • • • • • • • • • | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 16 17 18 19 20 | Triggers Clocks Interlock |
| | Clocks MCH1 CLK1 to AMC TCLKA | | | ******* | | | > | - | - | - | - | | Clk1 | TCLKA |
| Clocks | Clocks AMC TCLKB to MCH1 CLK2 | | | ******* | | | | - | - | - | | | Clk2 | TCLKS |
| | Clocks MCH1 CLK3 to AMC CLK3 (FCLKA) | | | 1 | | | - | - | - | - | | | Clk3 | PCIe Clock |

Backplane topology

Delivery comprises

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | MicroTCA system, 5 U, 42 HP, 373 mm deep, zinc-plated |
| 2 | 7 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with star topology for 7 AdvancedMC modules, 1 MCH and 1 power module |
| 4 | 1 | Hot-swap fan module with cooling unit manager (CU EMMC) and 6 fans |
| 5 | 1 | Air filter, exchangeable from front |

Order Information

| Height mm | Height U | Width HP | Depth mm | Number of slots | Part no. | |
|--------------|-------------|-------------|-------------|-----------------|-----------|--|
| 222.25 | 5 | 42 | 373 | 7 | 11850-021 | |
| Accessories | | | | | | |

| Power module MicroTCA, AC/DC, double full-size, with power management (PM EMMC) 550 W, 1 piece - page 8.52 | 11098-438 |
|--|-----------|
| Splitting kit PU 5 pieces | 20849-115 |
| PFM, single full-size 12 V_{DC} input, 40 A, with PM EMMC, non-redundant, with reverse polarity and overvoltage protection, 1 piece | 21596-571 |
| PFM, single full-size 12 V _{DC} input, 80 A, with PM EMMC, non-redundant, without reverse polarity and overvoltage protection, 1 piece | 21596-572 |
| Replacement parts (FRUs) | |
| Fan tray (21850-113) | Page 8.54 |
| Air filter (21850-116) | Page 8.55 |

Note

■ Modified systems available on request



MicroTCA.4 system, 9 U, 84 HP, for 12 double mid-size AdvancedMC modules

- In accordance with PICMG MTCA.4 R1.0 specification
- 9 U, 84 HP cube system for
 12 double mid-size-AdvancedMC modules,
 2 double full-size MCHs and 4 double full-size power modules
- 12 rear transition module slots for double mid-size
- Backplane with dual star topology, direct connections for S-ATA/SAS, clock and trigger lines as per PICMG MTCA.4
- Clock topology to PICMG AMC.0 R2.0
- 2 hot-swap fan modules with cooling unit manager (CU EMMC) in push/pull configuration, airflow from front to rear, fan speeds for front and rear sections can be separately adjusted via the MCH



Front view



| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | MicroTCA system, 9 U, 84 HP, 373 mm deep, zinc-plated |
| 2 | 12 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with dual star topology for 12 AdvancedMC modules, 2 MCHs and 4 power modules |
| 4 | 2 | Hot-swap fan module with cooling unit manager (CU EMMC) and 4 fans; |
| 5 | 1 | Air filter, exchangeable from front |



Rear view

Order Information

Height

Height

| • | • | | • | | | | | |
|---|-------------|----|-----|----------|-----------|--|--|--|
| mm | U | HP | mm | of slots | | | | |
| 400.05 | 9 | 84 | 373 | 12 | 11890-035 | | | |
| Accesso | Accessories | | | | | | | |
| Power module MicroTCA, AC/DC, double full-size, with power management (PM EMMC) 11098-438 | | | | | | | | |
| | | | | | | | | |

Depth

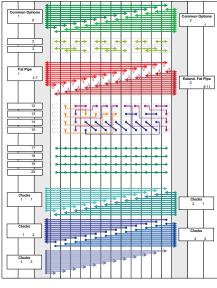
Number

Part no.

Width

| with power management (PM EMMC) 550 W, 1 piece - page 8.52 | 11098-438 |
|--|-----------|
| Splitting kit PU 5 pieces | 20849-115 |
| PFM, single full-size 12 $\rm V_{DC}$ input, 40 A, with PM EMMC, non-redundant, with reverse polarity and overvoltage protection, 1 piece | 21596-571 |
| PFM, single full-size $12 V_{DC}$ input, $80 A$, with PM EMMC, non-redundant, without reverse polarity and overvoltage | 21596-572 |

| protection, 1 piece | |
|--------------------------|-----------|
| Replacement parts (FRUs) | |
| Fan tray (21850-115) | Page 8.55 |
| Air filter (21850-117) | Page 8.55 |



Backplane topology

12611050





MicroTCA.1 systems, cube, 5 U, 42 HP, for 6 double AdvancedMC modules

- In accordance with PICMG MTCA.1 R1.0 specification
- 5 U, 42 HP cube system for 3 double mid-size, 3 double full-size AdvancedMC modules, 1 double full-size MCH and 1 double full-size PSU slot
- Backplane with star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Hot-swap fan module with cooling unit manager (CU EMMC), airflow from bottom to top
- Air filter, exchangeable from front
- Pluggable 300 W PSU with AC mains input in double full-size format, MicroTCA power management (PM EMMC) on backplane

12912005

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | MicroTCA cube, 5 U, 42 HP, 216.5 mm deep, zinc-plated |
| 2 | 6 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with star topology for 6 AdvancedMC modules, 1 MCH and 1 PSU |
| 4 | 1 | Hot-swap fan module with cooling unit manager (CU EMMC) and 4 fans |
| 5 | 1 | Air filter, exchangeable from front |
| 6 | 1 | Pluggable PSU, 300 W, double full-size format |

Order Information

| Height | Height | Width | Depth | Number | Part no. | |
|--------------------------|------------|-----------|-------|----------|-----------|--|
| mm | U | HP | mm | of slots | | |
| 222.35 | 5 | 42 | 373 | 6 | 11850-020 | |
| Accessor | ies | | | | | |
| Power mo | 11098-416 | | | | | |
| Power mo | 11098-392 | | | | | |
| Splitting I | 20849-115 | | | | | |
| Advanced | Page 8.60 | | | | | |
| Advanced | Page 8.64 | | | | | |
| Equipmen | | Page 3.38 | | | | |
| Replacement parts (FRUs) | | | | | | |
| Fan tray (2 | 21850-114) | | | | Page 8.54 | |
| | | | | | | |

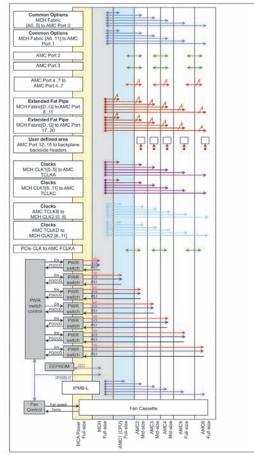
Note

12912051

Modified systems available on request



For further information www.schroff.biz/oneclick oneClick search code = Part no.



Backplane topology





Common Options MCH1 Fabric [A] to Common Options MCH1 Fabric [A] to AMC Port 2 AMC Port 3 Extend. Fat Pipe MCH1 Fabric [D;G] to AMC Port [4:7] Clocks CH1 CLK1 to AMC TCLKA (CLK1) Clocks CH1 CLK3 to AMC FCLKA (CLK3) Clocks MCH1 CLK2 DC/DC Converter 3.3V PRESENT# ENABLE# AMC2# (PCle or Storage) AMC3# (CPU or PCle or AMC1# AMC4# MCH1# On Board Power Management (CPU) (PCIe)

Storage)

MicroTCA.0 system, cube, 3 U, 30 HP, for 4 single full-size AdvancedMC modules

- In accordance with PICMG MTCA.0 R1.0 specification
- Cube systems for wall mounting 4 single full-size AdvancedMC modules and 1 single full-size
- Backplane with star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Power supply via 250 W open-frame PSU, mains supply via IEC plug on rear, switching logic for individual slots on backplane

NEW

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | MicroTCA system, cube, 3 U, 30 HP, 250 mm deep |
| 2 | 4 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with star topology for 4 AdvancedMC modules and 1 MCH |
| 4 | 2 | Fan for forced ventilation of slots |
| 5 | 1 | 250 W open-frame PSU and IEC mains inlet with switch and fuse; power switching to slots via power management board |
| 6 | 1 | Power management board for 21850-046 and 21850-081 |

Order Information

| Height | Width | Depth | Number of slots | Part no. | | | |
|-----------------------------------|-------------|-------|-----------------|-----------|--|--|--|
| U | HP | mm | | | | | |
| 3 | 30 | 250 | 4 | 21850-046 | | | |
| Accessori | Accessories | | | | | | |
| AdvancedMC front panels Page 1997 | | | | | | | |
| Advanced | Page 8.64 | | | | | | |
| | | | | | | | |

Note

Modified systems available on request



For further information www.schroff.biz/oneclick oneClick search code = Part no.

Backplane topology



MicroTCA.0 system, 1 U, 84 HP, for 6 single mid-size AdvancedMC modules

- In accordance with PICMG MTCA.0 R1.0 specification
- 1 U, 19" subrack system for 6 single mid-size AdvancedMC modules, 1 single full-size MCH
- AC mains input (100 ... 240 V_{AC}) on rear of case, 250 W PSU built in, power management (PM EMMC) on backplane
- Backplane with star topology, direct connections for S-ATA / SAS
- Clock topology to PICMG AMC.0 R2.0, PCle clock (MLVDS) generation on the backplane
- Hot-swap fan module with cooling unit manager (CU EMMC), airflow from right to left
- Air filter, swappable from front



Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | MicroTCA system, 1 U, 84 HP, 301 mm deep, powder-coated, black, RAL 9005 |
| 2 | 6 | Pin position AdvancedMC module, with guide rail, for horizontal board mounting |
| 3 | 1 | Backplane with star topology for 6 AdvancedMC modules and 1 MCH |
| 4 | 1 | Hot-swap fan module with cooling unit manager (CU EMMC) and 5 fans; |
| 5 | 1 | Air filter, exchangeable from front |
| 6 | 1 | 250 W open frame PSU and power management (PM EMMC) on backplane |

Order Information

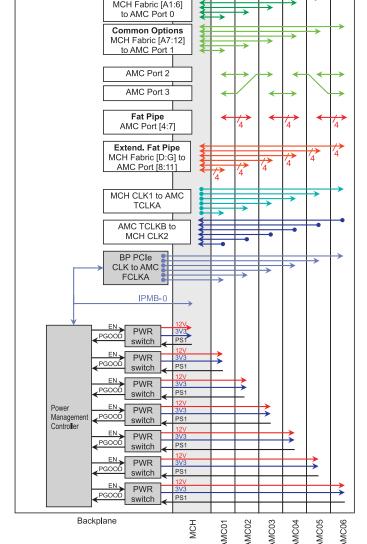
| Height | Height | Width | Depth | Number | Part no. | | |
|--------------------------|------------------------------------|-------|-------|----------|-----------|--|--|
| mm | U | HP | mm | of slots | | | |
| 44.45 | 1 | 84 | 301 | 6 | 11850-017 | | |
| Accesso | ries | | | | | | |
| Advance | AdvancedMC front panels Page 8.60 | | | | | | |
| Advance | AdvancedMC filler panels Page 8.64 | | | | | | |
| Equipme | Equipment cables Page 3.3 | | | | | | |
| Replacement parts (FRUs) | | | | | | | |
| Fan tray | Page 8.53 | | | | | | |
| Air filter (| Air filter (21850-118) | | | | | | |
| | | | | | | | |



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

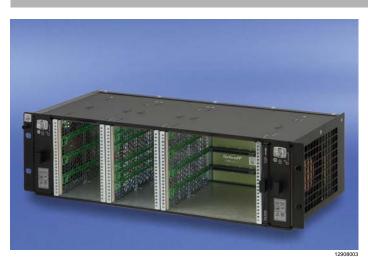


Common Options



Backplane topology





AMC 6

AMC 4

AMC 2

AMC 7

AMC5

AMC 3

AMC₁

AMC 8

5

N

12907050

MCH 2

AMC 10

MCH 1

AMC 9

MicroTCA.0 system, 3 U, 84 HP, for 10 single full-size AdvancedMC modules

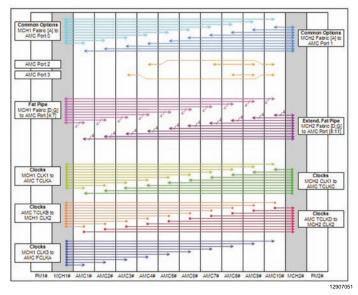
- In accordance with PICMG MTCA.0 R1.0 specification
- 3 U, 19" subrack system for 10 single full-size AdvancedMC modules, 2 single full-size MCHs and 2 power modules with up to 12 HP width
- Instead of 8 single full-size AdvancedMC modules, the righthand board cage can be used for 4 double full-size modules
- Backplane with dual star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Two hot-swap fan modules in push/pull configuration, each with cooling unit manager (CU EMMC), airflow from right to left
- Air filter, exchangeable from front, with presence signal

Delivery comprises

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | MicroTCA system, 3 U, 84 HP, 216 mm deep, powder-coated, black, RAL 9005 |
| 2 | 10 | Pin position AdvancedMC module, with guide rail, for horizontal board mounting |
| 3 | 1 | Backplane with dual-star topology for 10 AdvancedMC modules, 2 MCHs and 2 power modules |
| 4 | 2 | Hot-swap fan unit with cooling unit manager (CU EMMC) and 1 fan; |
| 5 | 1 | Air filter, exchangeable from front |
| 6 | 4 | Splitting kit |

Slot allocation

S



PM₂

PM 1

Backplane topology



ServicePLUS see page 8.112

Order Information

| Height mm | Height U | Width HP | Depth mm | Number of slots | Part no. |
|--------------|-------------|-------------|-------------|-----------------|-----------|
| 133.35 | 3 | 84 | 216 | 10 | 11850-011 |
| Accessories | | | | | |

PFM, single full-size 12 V_{DC} input, 40 A, with PM EMMC, non-redundant, with reverse polarity and overvoltage 21596-571 protection, 1 piece

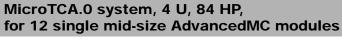
PFM, single full-size 12 V_{DC} input, 80 A, with PM EMMC, non-redundant, without reverse polarity and overvoltage 21596-572 protection, 1 piece

| AdvancedMC front panels | Page 8.60 |
|--------------------------|-----------|
| AdvancedMC filler panels | Page 8.64 |
| Replacement parts (FRUs) | |
| Fan tray (21850-038) | Page 8.53 |
| Air filter (21850-034) | Page 8.55 |
| | |

Note

- For description of the power supply module see page 8.50
- Replacement parts (FRUs) see from page 8.53
- User manual: Please enter order number at www.schroff.biz/oneclick





- In accordance with PICMG MTCA.0 R1.0 specification
- 4 U, 19" subrack system for 12 single mid-size AdvancedMC modules, 2 single full-size MCHs and 2 power modules with up to 12 HP width
- Backplane with dual star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Two hot-swap fan modules on rear of case, each with cooling unit manager (CU EMMC), airflow from bottom front to rear
- Air filter, exchangeable from front, with presence signal



Delivery comprises

| | | • |
|------|-----|---|
| ltem | Qty | Description |
| 1 | 1 | MicroTCA system, 4 U, 84 HP, 296 mm deep, powder-coated, black, RAL 9005 |
| 2 | 12 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with dual-star topology for 12 AdvancedMC modules, 2 MCHs and 2 power modules |
| 4 | 2 | Hot-swap fan module with cooling unit manager (CU EMMC) and 2 fans |
| 5 | 1 | Air filter, exchangeable from front |
| 6 | 1 | Cable channel |

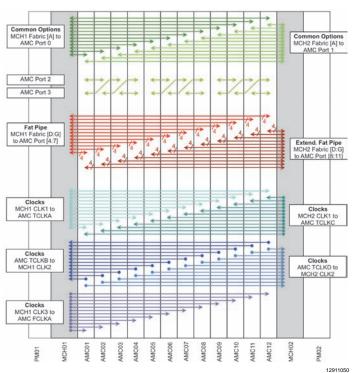
Order Information

| Height mm | Height U | Width HP | Depth mm | Number of slots | Part no. |
|--------------------------------------|-------------|-------------|-------------|-----------------|-----------|
| 177.8 | 4 | 84 | 296 | 12 | 11850-018 |
| Accessor | ries | | | | |
| PFM, sing non-redur protection | 21596-571 | | | | |
| PFM, sing non-redur protection | 21596-572 | | | | |
| Advance | Page 8.60 | | | | |
| Advance | Page 8.64 | | | | |
| Replacen | | | | | |
| Fan tray (| Page 8.53 | | | | |
| Air filtor (2 | Page 8 55 | | | | |



For further information www.schroff.biz/oneclick oneClick search code = Part no.





Backplane topology



1290701



Backplane topology



ServicePLUS see page 8.112

MicroTCA.0 systems, 6 U, 84 HP, for 9 single full-size AdvancedMC modules

- In accordance with PICMG MTCA.0 R1.0 specification
- 6 U, 19" subrack system for 9 single full-size AdvancedMC modules, 2 single full-size MCHs and 2 power modules with up to 9 HP width
- Backplane with dual star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R1.0
- Two hot-swap fan modules in push/pull configuration, each with cooling unit manager (CU EMMC), airflow from bottom front to rear top
- Air filter, exchangeable from front, with presence signal

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | MicroTCA system, 6 U, 84 HP, 197 mm deep, powder-coated, black, RAL 9005 |
| 2 | 9 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with dual-star topology for 9 AdvancedMC modules, 2 MCHs and 2 power modules |
| 4 | 2 | Hot-swap fan unit with cooling unit manager (CU EMMC) and 2 fans; lower fan unit with interface and display for Telco alarms |
| 5 | 1 | Air filter, exchangeable from front |
| 6 | 1 | Cable channel |

Order Information

U

Fan tray (21850-036) Air filter (21850-033)

Height

Width

HP

Height

mm

12806805

| 266.7 | 6 | 84 | 197 | 9 | 10849-005 |
|-----------------------------------|------------------|------------|-----|---|-----------|
| Accesso | ories | | | | |
| PFM, sir non-redu protectio | MC, 21596-571 | | | | |
| PFM, sir non-redu protectio | | | | | |
| Advance | edMC fro | ont panels | | | Page 8.60 |
| Advance | edMC fil | ler panels | | | Page 8.64 |
| Replace | ment pa | rts (FRUs) | | | |

Depth

mm

Number

of slots

Part no.

Page 8.54

Page 8.54

Note

- For description of the power supply module see page 8.50
- Replacement parts (FRUs) see from page 8.53
- User manual: Please enter order number at www.schroff.biz/oneclick



MicroTCA.0 case systems, cube, 3 U, 30 HP, for 4 single full-size AdvancedMC modules

- In accordance with PICMG MTCA.0 R1.0 specification
- Cube case system with tip-up feet for 4 single full-size AdvancedMC modules 1 single full-size MCH
- Backplane with star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Power supply via 250 W open-frame PSU, mains supply via IEC plug on rear, switching logic for individual slots on backplane



Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | MicroTCA case system with tip-up feet, cube, (ratiopacPRO case) |
| 2 | 4 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with star topology for 4 AdvancedMC modules and 1 MCH |
| 4 | 3 | Fan for forced ventilation of slots |
| 5 | 1 | 250 W open-frame PSU and IEC mains inlet with switch and fuse |
| 6 | 1 | Power management board on 21850-081 |

Order Information

| Description | Height U | Width HP | Depth mm | Number of slots | Part no. |
|--|-------------|-------------|-------------|-----------------|-----------|
| Case system, power switching to slots via presence signal | 3 | 30 | 316 | 4 | 21850-045 |
| Case system, power switching to slots via power management board | 3 | 30 | 316 | 4 | 21850-081 |
| Accessories | | | | | |
| AdvancedMC front panels Page 8.60 | | | | | Page 8.60 |
| AdvancedMC filler panels Page 8 | | | | Page 8.64 | |

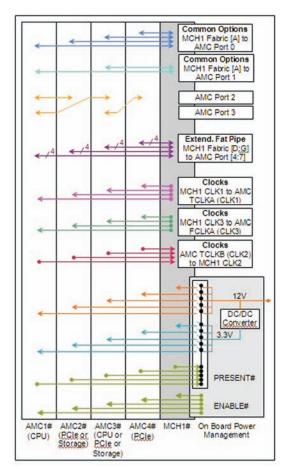
Note

■ Modified systems available on request



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.





Backplane topology





MicroTCA.0 case system, 3 U, 84 HP, for 4 single AdvancedMC modules

- Evaluation system for AdvancedMC modules
- 19" desktop case system with tip-up feet for 4 single AdvancedMC modules (12 HP)
- Backplane with direct connections and headers on rear of backplane to connect external measuring equipment
- Case top cover and top board cage plate are easily removable (good access to the modules)
- Active heat dissipation, 2 fans (29 m³/h, 17 cfm) per slot
- Power supply via 400 W ATX PSU, mains supply via IEC plug on front

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | MicroTCA case system |
| 2 | 4 | Pin position AdvancedMC module, with guide rail, for vertical board mounting |
| 3 | 1 | Backplane with direct connections for 4 AdvancedMC-modules |
| 4 | 8 | Fan for forced ventilation of slots |
| 5 | 1 | 400 W ATX PSU and IEC mains input with switch |

Order Information

| Height | Height | Width | Depth | Number | Part no. |
|-------------|--------|-------|-------|----------|-----------|
| mm | U | HP | mm | of slots | |
| 132.5 | 3 | 84 | 316 | 4 | 11850-013 |
| Accessories | | | | | |

| Accessories | |
|--------------------------|-----------|
| AdvancedMC front panels | Page 8.60 |
| AdvancedMC filler panels | Page 8.64 |

Note

User manual: Please enter order number at www.schroff.biz/oneclick



12908050

For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

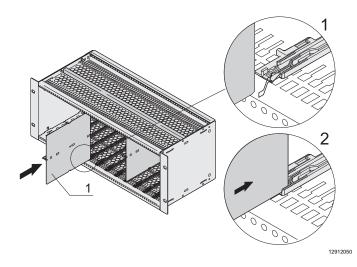
Backplane topology



Accessories and field replaceable units (FRUs)

Field replaceable unit (FRU) designates system components that can be replaced on site. This reduces system downtime to a minimum. Schroff offers various FRU components for AdvancedTCA systems:

- Splitting kit, see page 8.48
- MicroTCA guide rails, see page 8.49
- Power feed-through modules, see page 8.50
- PSUs (AC/DC, double full-size) with and without management, see from page 8.51
- Fan modules, see from page 8.53
- Air filters, see page 8.55



Splitting kit

- For fitting 2 single AdvancedMC modules one above the other in one double AdvancedMC slot
- Splitting kit is inserted into the appropriate receptacle of the Schroff MicroTCA guide rail and locks into the appropriate stud of the guide rail
- With the use of the splitting kit, no slots are lost

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Stainless steel, chassis to accommodate a guide rail |
| 2 | 1 | Guide rail, AdvancedMC |
| 3 | 1 | Splitting extrusion, centre |
| 4 | 1 | ESD contact spring |
| 5 | 1 | Fixing material kit, user manual |

Order Information

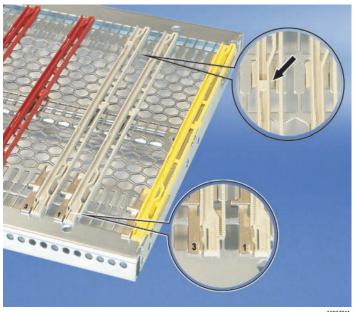
| Description | Part no. |
|----------------------------|-----------|
| Splitting kit, PU 5 pieces | 20849-115 |



12807022

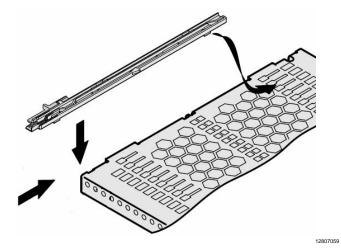
bottom (red)

top (green)



Guide rails bottom, grey, for guide rails of 6 HP wide (full-size)

MicroTCA carrier hubs



MicroTCA guide rails

■ Easy installation without tools in 1 HP grid; the minimum distance between two guide rails is 3 HP (compact)

Order Information

| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Guide rail, top, green, with ESD clip; for all modules | 10 | 20849-200 |
| Guide rail, top, green, with ESD clip; for all modules | 100 | 20849-201 |
| Guide rail bottom, red; for AdvancedMC function modules | 10 | 20849-194 |
| Guide rail bottom, red; for AdvancedMC function modules | 100 | 20849-195 |
| Guide rail bottom, yellow; for power supplies | 10 | 20849-196 |
| Guide rail bottom, yellow; for power supplies | 100 | 20849-197 |
| Guide rail bottom, grey; for left-hand guide rail of a 6 HP wide MicroTCA carrier hub (designation 3) | 10 | 20849-202 |
| Guide rail bottom, grey; for right-hand guide rail of a 6 HP wide MicroTCA carrier hub (designation 1) | 10 | 20849-198 |
| Guide rail bottom, grey; for right-hand guide rail of a 6 HP wide MicroTCA carrier hub (designation 1) | 100 | 20849-199 |

Note

CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>





Photo shows 21596-571

MicroTCA power feeder modules, single full-size

- Infeed of +12 V_{DC} supply voltage from an external source via D-Sub plug to 16 x 12 V_{DC} outputs to MicroTCA backplane
- Generation of +3.3 V_{DC} management voltage and distribution to 16 outputs
- Used in the power module slot (single full-size) instead of a MicroTCA power module, plug and form factor compatible
- 2 versions
 - With power management (PM EMMC), with protection against overvoltage and polarity reversal of input voltage, 5-pin D-Sub input plug
 - With power management (PM EMMC), no protection against overvoltage or polarity reversal of input voltage, 5-pin D-Sub input plug

Delivery comprises

| Item | Qty | Description |
|------|-----|---------------------------------------|
| 1 | 1 | Power feeder module, single full-size |
| 2 | 1 | Power management mezzanine board |

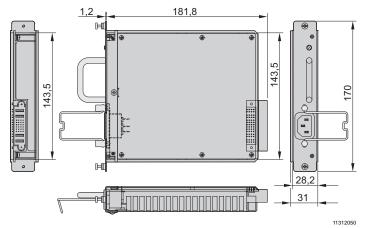
Order Information

| MicroTCA power feeder, single full-size | Part no. |
|--|-----------|
| With power management with overvoltage protection | 21596-571 |
| With power management without overvoltage protection | 21596-572 |
| Accessories | |
| Connection cable for power feeder module, | |
| 5-pin D-Sub 5W5 (-48 $\rm V_{DC}$) on M5 ring terminal, cable length 1.8 m, 1 piece | 23204-835 |





Photo shows 11098-392



AC/DC, double full-size, without management

- Wide input voltage range 90 ... 264 V_{AC}
- Active power factor correction
- Construction compatible with AdvancedMC double full-size
- Single-wire current share cable for redundancy operation
- 2 output voltages, 12 V and 3.3 V
- Corresponds to EMC class B as per EN 55022
- Without MicroTCA power management controller
- Mains input at front

NEW

Delivery comprises

| Qty | Description | |
|-----|---|--|
| 1 | PSU for MicroTCA | |
| | height double (148.3 mm) | |
| | width full-size (6 HP) | |
| | depth 186.65 mm | |
| | connector Molex SSI | |
| | front panel with handle and EMC gasket (fitted) | |

Order Information

| Voltage | Current | Power | Description | Part no. |
|---|---|-------|-------------|-----------|
| V | Α | W | | |
| V ₁ : 12 V ₂ : 3.3 | I ₁ : 25 I ₂ : 3 | 300 | MCA 300 AC | 11098-392 |
| V ₁ : 12 V ₂ : 3.3 | I ₁ : 45.8 I ₂ : 3 | 550 | MCA 550 AC | 11098-416 |

Note

- Output data for $T_A = -25 ... 55$ °C with forced cooling of 20 cfm
- Connector FCI 51720-10202402AA or Molex 87631-2019





AC/DC, double full-size, with power management (PM EMMC)

- Wide input voltage range 90 ... 264 V_{AC}
- Active power factor correction
- Construction compatible with AdvancedTCA double full-size
- MicroTCA power management in accordance with PICMG MTCA.0
- 16 output voltages 12 V and 16 x 3.3 V
- Corresponds to EMC class B as per EN 55022
- Mains input at front



Delivery comprises

| Qty | Description | |
|-----|---|--|
| 1 | PSU for MicroTCA | |
| | height double (148.3 mm) | |
| | width full-size (6 HP) | |
| | depth 186.65 mm | |
| | connector MicroTCA Power | |
| | front panel with handle and EMC gasket (fitted) | |

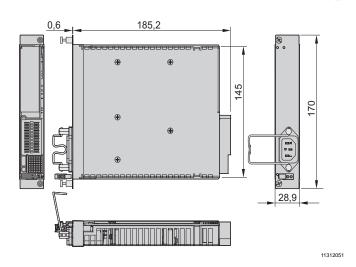
Order Information

| Voltage V | Current A | Power W | Description | Part no. |
|---|---|------------|-------------|-----------|
| V ₁ : 12 V ₂ : 3.3 | I ₁ : 45.8 I ₂ : 3 | 550 | MTCA 550 AC | 11098-438 |

Note

- Output data for T_A = -25 ... 55 °C with forced cooling of 20 cfm
- Connector to PICMG MTCA.0, MicroTCA power connector





Fan module for MicroTCA.0 system, 1 U

- Hot-swap fan tray with 4 regulated axial fans (40.2 m³/h each), free blowing, 1 unregulated axial fan (17 m³/h), 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)



| Description | Qty/PU piece | Part no. |
|--|-----------------|-----------|
| Fan module for 1 U MicroTCA system (11850-017) | 1 | 21850-095 |



...

Fan module for MicroTCA.0 systems, 3 U, without Telco alarm panel

- Fan tray with 1 axial fan (225 m³/h), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Fan module for 3 U MicroTCA system (11850-003) | 1 | 21850-038 |



Fan module for MicroTCA.0 system, 4 U

- Hot-swap fan tray with 2 regulated axial fans (234 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

| Description | Qty/PU piece | Part no. |
|---|-----------------|-----------|
| Fan module for 4 U MicroTCA systems (11850-018) | 1 | 21850-112 |

Fan module for MicroTCA.4 cube system, 5 U



- Hot-swap fan tray with 6 regulated axial fans (109 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC); fan speeds for front and rear sections independently adjustable via MCH

Order Information

| Description | Qty/PU piece | Part no. |
|--|-----------------|-----------|
| Fan module | | |
| for 5 U physics cube system (11850-021), | 1 | 21850-113 |
| 1 piece | | |

129120

Fan module for 5 U MicroTCA.1 cube system, 5 U



- Hot-swap fan tray with 4 regulated axial fans (109 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

| Description | Qty/PU piece | Part no. |
|--|-----------------|-----------|
| Fan module for 5 U cube system (11850-020) | 1 | 21850-114 |

291200

Fan modules for MicroTCA.0 systems, 6 U, without Telco alarm panel



- Fan tray with 2 axial fans (460 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Fan module for 6 U MicroTCA system (10849-005) | 1 | 21850-036 |

Main Catalogue

E 10/2012

Fan module for MicroTCA.0 systems, 6 U, with Telco alarm panel

- \blacksquare Fan tray with 2 axial fans (460 m 3 /h each), free blowing, 12 V $_{DC}$
- With cooling unit enhanced module management controller (CU EMMC)
- With Telco alarm interface, includes 3 LEDs, one telco alarm connector (DB15) and one telco alarm silencing push-button



| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Fan module for 6 U MicroTCA system (10849-005) | 1 | 21850-037 |



Fan module for MicroTCA.4, 19" systems, 9 U

- Hot-swap fan tray with 5 regulated axial fans (3 x 289 m³/h each, free blowing and 2 x 220 m³/h, free blowing), 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC); fan speeds for front and rear sections independently adjustable via MCH

Order Information

| Description | Qty/PU piece | Part no. |
|--|-----------------|-----------|
| Fan module for 9 U, 19" physics system (11890-035) | 1 | 21850-115 |



800

Air filters

- Material: polyurethane UL 94 HF1
- 45 ppi, 80 % dust reduction under NEBS GR-78 core standard

Order Information

| Description | Qty/PU | Part no. |
|---|--------|-----------|
| Air filter for 1 U MicroTCA.0 system (11850-017) | 1 | 21850-118 |
| Air filter for 3 U MicroTCA.0 system (11850-003) | 1 | 21850-034 |
| Air filter for 4 U MicroTCA.0 system (11850-018) | 1 | 21850-119 |
| Air filter for 5 U MicroTCA.1 cube system (11850-020) | 1 | 21850-120 |
| Air filter for 5 U MicroTCA.4 cube system (11850-021) | 1 | 21850-116 |
| Air filter for 6 U MicroTCA.0 systems (10849-005, 11850-005, 11850-007) | 1 | 21850-033 |
| Air filter for 9 U MicroTCA.4 19" system (11890-035) | 1 | 21850-117 |
| | | |



Photo shows air filter 21850-033

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

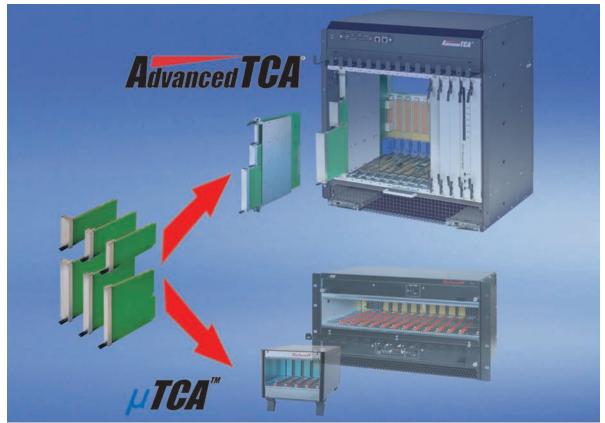
Systems 8

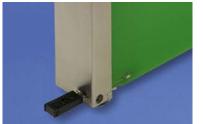
Power supply units 9

Backplanes .. 10

Connectors, front

Systems - AdvancedMC modules





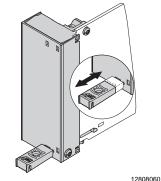
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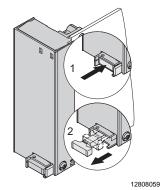


Stainless steel



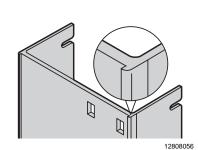
Pull-handle mechanism

- For compact, mid-size and full-size module widths
- Forward protrusion of handle 20 mm, width 8 mm



Push-pull handle mechanism

- For mid-size and full-size module widths
- Forward protrusion of handle 5 mm, width 14 mm



Aluminium extrusion

panel component system 11





Downloads and further important information can be found on the Internet under www.schroff.biz

Overview 8.56

AdvancedMC module mechanics

■ Front panels with two locking mechanisms, usable for AdvancedMC carriers and MicroTCA systems

■ Front panels in steel or aluminium extrusion

- Dimensions
 - Single compact, mid-size, full-size
 - Double compact, mid-size, full-size
- Ruggedized AdvancedMC modules for MicroTCA.1 and MicroTCA.4 applications
- MicroTCA filler modules with adjustable airflow





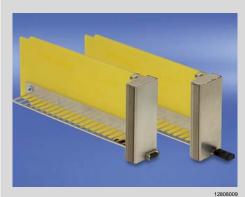


Fig. A



AdvancedMC module mechanics

- For PICMG[®] AMC.0 R2.0 (Fig. A), locking of modules without screws
- Ruggedized module mechanics for MicroTCA.1 and MicroTCA.4 (Fig. B) applications, with patented screw locking
- EMC shielded front panel in two materials (stainless steel; aluminium)
- Two different handle mechanisms (pull, push-pull)



service

AdvancedMC-MicroTCA filler modules

- Front panels with handle, PCB and air baffle for compact, mid-size and full-size AdvancedMC modules
- Air baffles to adjust air resistance of an unused slot
- Air passage adjustable (sliding plates)

Modules with push-pull-handle mechanism 8.58 Modules with pull-handle mechanism 8.59

AdvancedMC module

mechanics

R2.0RC1.2

PICMG AMC.0

Front panels for module with pull-handle mechanism . . . 8.60 Pull-handle

mechanism 8.61
Modules with

ruggedized pull-handle mechanism 8.62

Filler modules for MicroTCA

Pull-handle mechanism 8.63
Air baffle for filler module ECO 8.66
Microswitch ... 8.67

ServicePLUS.. 8.67

ServicePLUS from page 8.67

e.g. individual configuration and assembly e.g. modifications (cut-outs, special colours, printing, front films) e.g. custom solutions (special sizes)

www.schroff.biz/serviceplus/

30407004

Modules with push-pull-handle mechanism, PICMG® AMC.0 R2.0

- Kit, shielded
- Push-pull-handle mechanism meets AdvancedMC standard; press handle (springs out) and pull to extract sub-assembly
- Push-pull-handle mechanism designed for microswitch activation (hot-swap); interlocking of modules without screws
- For conventional, cutaway and hybrid carriers
- Includes of light pipes
- Front panels in 2 materials:
 - Stainless steel
 - Aluminium extrusion; for foil printing

Delivery comprises (kit)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | U-shaped front panel, stainless steel or Al extrusion |
| 2 | 1 | Accepts light pipe and board bracket at top, Zn die-cast, nickel-plated |
| 3a | 1 | Light pipe, top, PC, UL 94 V-0 |
| 3b | 1 | Light pipe, bottom, PC, UL 94 V-0 |
| 4 | 1 | Push-pull-handle mechanism with microswitch activation and board bracket |
| 5 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 6 | 1 | Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 7 | 1 | Assembly kit |

Order Information

| Module with push-handle mechanism, | Н | h | Part no. | Part no. Stainless |
|------------------------------------|-----------|-------|-----------|-----------------------|
| PICMG [®] AMC.0 R2.0 | mm | mm | Aluminium | steel |
| Single mid-size, 4 HP | 73.8 | 60.8 | 20849-288 | 20849-332 |
| Single full-size, 6 HP | 73.8 | 60.8 | 20849-290 | 20849-334 |
| Double mid-size, 4 HP | 148.8 | 135.8 | 20849-289 | 20849-333 |
| Double full-size, 6 HP | 148.8 | 135.8 | 20849-291 | 20849-335 |
| Accessories | | | | |
| Microswitch for Advanced | 20849-209 | | | |

| Microswitch for AdvancedMC modules "normally | 20849-209 |
|---|-----------|
| open" for soldering (SMD), PU 10 pieces - page 8.67 | 20849-209 |
| Filler Modules | Page 8.63 |

Note

12808063

- Pull-handle mechanism see page 8.61
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu

FRONT PANEL **EXPRESS**





For further information www.schroff.biz/oneclick oneClick search code = Part no.

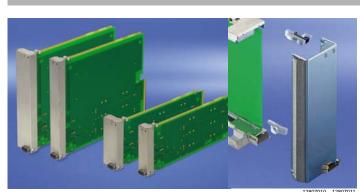
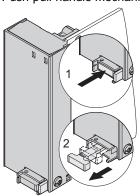
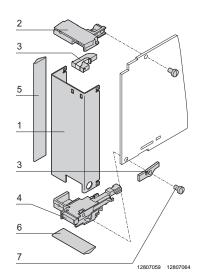


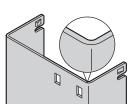
Photo shows modules with steel front panel (PCB not included)

Push-pull-handle mechanism

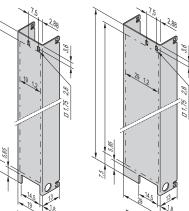




Aluminium profile



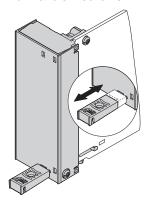
Stainless steel profile

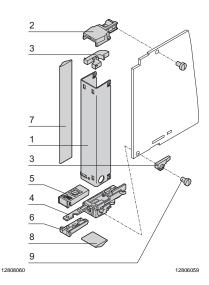


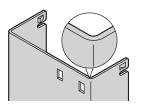
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Photo shows modules with steel front panel (PCB not included)

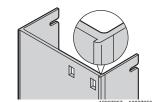
Pull-handle mechanism



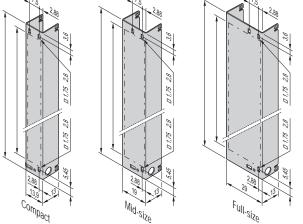








Aluminium extrusion



Modules with pull-handle mechanism, PICMG® AMC.0 R2.0

- Module in accordance with AdvancedMC standard
- For installation in MicroTCA chassis or AdvancedMC carriers (e.g. conventional, cutaway and hybrid carriers)
- Front panels in 2 versions:
 - Stainless steet
 - Aluminium extrusion; for foil printing

Delivery comprises (kit)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | U-shaped front panel, stainless steel or Al extrusion |
| 2 | 1 | Accepts light pipe and board bracket at top, Zn die-cast, nickel-plated |
| 3a | 1 | Light pipe, top, PC, UL 94 V-0 |
| 3b | 1 | Light pipe, bottom, PC, UL 94 V-0 |
| 4 | 1 | Pull-handle mechanism with microswitch activation and board bracket |
| 5+6 | 1 | Pull-handle, PC, UL 94 V-0, black |
| 7 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 8 | 1 | Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 9 | 1 | Assembly kit |

Order Information

| Module with pull-handle mechanism, PICMG [®] AMC.0 R2.0 | H mm | h mm | Part no. Aluminium | Part no. Stainless steel |
|--|---------|---------|--------------------|--------------------------------|
| Single compact, 3 HP | 73.8 | 60.8 | 20849-312 | 20849-127 |
| Single mid-size, 4 HP | 73.8 | 60.8 | 20849-268 | 20849-128 |
| Single full-size, 6 HP | 73.8 | 60.8 | 20849-270 | 20849-129 |
| Double compact, 3 HP | 148.8 | 135.8 | 20849-313 | 20849-130 |
| Double mid-size, 4 HP | 148.8 | 135.8 | 20849-269 | 20849-131 |
| Double full-size, 6 HP | 148.8 | 135.8 | 20849-271 | 20849-132 |

Accessories

| Microswitch for AdvancedMC modules "normally open" for soldering (SMD), PU 10 pieces - page 8.67 | 20849-209 |
|--|------------|
| Filler Modules | Seite 8.63 |
| Air baffle modules | Seite 8.63 |
| Air battle modules | Seite 8 |

Note

- Mechanism with pull-handle mechanism see page 8.61
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, <u>www.frontpanelexpress.eu</u>

FRONT PANEL

FXPRFSS



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



Aluminium extrusion

Front panels for module with pull-handle mechanism, PICMG® AMC.0 R2.0

- Front panel for pull-handle mechanism (with cut-outs for light pipe)
- For AdvancedMC modules
- 2 front panel materials:
 - Stainless steel
 - Aluminium extrusion; for foil printing

Delivery comprises

| Item | Qty | Description |
|------|-----|----------------------|
| 1 | 1 | U-shaped front panel |

Order Information

| Front panel for module with pull-handle mechanism, PICMG [®] AMC.0 R2.0 | Part no. Aluminium | Part no. Stainless steel |
|--|-----------------------|--------------------------------|
| Single compact, 3 HP | 30849-708 | 30849-402 |
| Single mid-size, 4 HP | 30849-658 | 30849-403 |
| Single full-size, 6 HP | 30849-682 | 30849-404 |
| Double compact, 3 HP | 30849-714 | 30849-405 |
| Double mid-size, 4 HP | 30849-670 | 30849-406 |
| Double full-size, 6 HP | 30849-694 | 30849-407 |

Note

- Locking mechanism for front panel see page 8.61
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, <u>www.frontpanelexpress.eu</u>

FRONT PANEL EXPRESS



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Stainless steel

2 3 7 1 3 5 4 6 8

Pull-handle mechanism

Pull-handle mechanism, PICMG® AMC.0 R2.0

- Complete pull-handle mechanism, designed for microswitch activation (hot-swap), includes light pipe
- For AdvancedMC modules

Delivery comprises (kit)

| Item | Qtv | Description |
|------|-----|--|
| 2 | 1 | Accepts light pipe and board bracket at top, Zn die-cast, nickel-plated |
| 3a | 1 | Light pipe, top, PC, UL 94 V-0 |
| 3b | 1 | Light pipe, bottom, PC, UL 94 V-0 |
| 4 | 1 | Pull-handle mechanism with microswitch activation and board bracket |
| 5+6 | 1 | Pull-handle, PC, UL 94 V-0, black |
| 7 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 8 | 1 | Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 9 | 1 | Assembly kit |

Order Information

| Pull-handle mechanism, PICMG® AMC.0 R2.0 | Part no. |
|--|-----------|
| For single compact, 3 HP | 20849-151 |
| For single mid-size, 4 HP | 20849-152 |
| For single full-size, 6 HP | 20849-153 |
| For double compact, 3 HP | 20849-154 |
| For double mid-size, 4 HP | 20849-155 |
| For double full-size, 6 HP | 20849-156 |

■ Front panel for pull-handle mechanism page 8.60



Modules with ruggedized pull-handle mechanism (MicroTCA.1 or MicroTCA.4), shielded

- Module in accordance with AdvancedMC standard
- Modules conform to:

 PICMG[®] AMC.0 R2.0

 Ruggedized: MicroTCA.1, MicroTCA.4
- Mounts in MicroTCA chassis or AdvancedMC carrier (e.g. cutaway, conventional or hybrid carrier)
- Stainless steel front panel
- Additional securing of components in MicroTCA system; with patented screw locking

Delivery comprises (kit)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | U-shaped front panel, stainless steel; with welded-on screw locking, Torx T10 |
| 2 | 1 | Board support, die-cast zinc, nickel-plated |
| 3a | 1 | Light pipe, top, PC, UL 94 V-0 |
| 3b | 1 | Light pipe, bottom, PC, UL 94 V-0 |
| 4 | 1 | Pull-handle mechanism with microswitch activation and board bracket |
| 5+6 | 1 | Pull-handle, PC, UL 94 V-0, black |
| 7 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 8 | 1 | Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| 9 | 1 | Assembly kit |

Order Information

| Module with ruggedized | Н | h | h1 | Part no. |
|------------------------|-------|-------|-------|-----------|
| pull-handle mechanism | mm | mm | mm | |
| Single compact, 3 HP | 95.0 | 73.8 | 60.8 | 21850-066 |
| Single mid-size, 4 HP | 95.0 | 73.8 | 60.8 | 21850-067 |
| Single full-size, 6 HP | 95.0 | 73.8 | 60.8 | 21850-068 |
| Double compact, 3 HP | 170.0 | 148.8 | 135.8 | 21850-069 |
| Double mid-size, 4 HP | 170.0 | 148.8 | 135.8 | 21850-070 |
| Double full-size, 6 HP | 170.0 | 148.8 | 135.8 | 21850-071 |

Accessories

| Microswitch for AdvancedMC modules "normally | 20849-209 |
|--|-----------|
| open" for soldering (SMD), PU 10 pieces - page 8.67 | |
| Individual components | - |

Screw locking (patented) for ruggedized front panel Screw retainer must be welded to front panel (screw,

expansion bolt, bushing; fitted), PU 10 pieces

Note

- Filler modules MicroTCA.1 and MicroTCA.4 see from page 8.64
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu

FRONT PANEL

EXPRESS



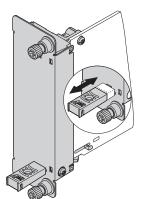
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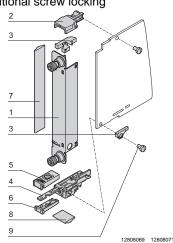
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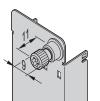


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Pull-handle mechanism with additional screw locking



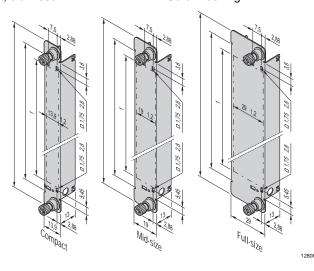






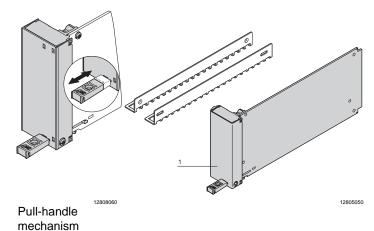


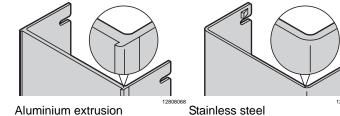
Screw locking





Filler module ECO, single, with air baffle





Filler modules with pull-handle mechanism

- Shielded filler modules are used to close unused slots
- The optional air baffle (airflow adjustable) can be used to prevent an air short-circuit
- For conventional, cutaway and hybrid carrier
- Pull-handle mechanism meets AdvancedMC standard; pull handle to extract sub-assembly
- 2 front panel materials:
 - Stainless steel
 - Aluminium extrusion; for foil labelling

Delivery comprises (assembled)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | AdvancedMC filler module, consisting of |
| | 1 | U-shaped front panel, stainless steel or Al extrusion |
| | 1 | Board support, die-cast zinc, nickel-plated |
| | 1 | PCB |
| | 1 | Pull-handle mechanism and board bracket |
| | 1 | Pull-handle, plastic, PC, UL 94 V-0, black |
| | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| | 1 | Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |

Order Information

| Filler module with | Part no. | Part no. |
|------------------------|-----------|--------------------|
| | | raitilo. |
| pull-handle mechanism | Aluminium | Stainless steel |
| Single compact, 3 HP | 20849-304 | 20849-022 |
| Single mid-size, 4 HP | 20849-248 | 20849-106 |
| Single full-size, 6 HP | 20849-250 | 20849-024 |
| Double compact, 3 HP | 20849-305 | 20849-023 |
| Double mid-size, 4 HP | 20849-249 | 20849-107 |
| Double full-size, 6 HP | 20849-251 | 20849-025 |

Note

- Please order air baffle separately, see page 8.63
- Low-cost alternative: Filler module with fixed handle, see page 8.66

Air baffle for AdvancedMC filler modules



Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Metal sheet with perforation, Al |
| 2 | 1 | Sliding metal sheet with perforation, Al |
| 3 | 1 | Assembly kit |

Order Information

| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Air baffle for compact filler module | 10 | 20849-016 |
| Air baffle for mid-size filler module | 10 | 20849-017 |
| Air baffle for full-size filler module | 10 | 20849-018 |

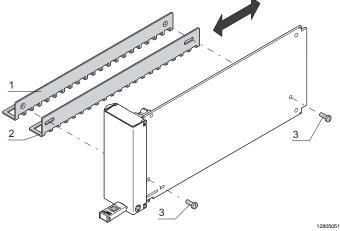




Photo shows mid-size double module

MicroTCA filler modules with air baffle

- Shielded filler modules are used to close unused slots and together with the air baffle prevent air short-circuits through the unused slot
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Can be screwed on; is inserted into the guide rail



Delivery comprises (assembled)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Front panel with side panel and air baffle, stainless steel, 1 mm; with captive screws (2 pieces) |
| 2 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |

Order Information

| Description | Part no. |
|--|-----------|
| MicroTCA filler module with air baffle, mid-size single | 21850-104 |
| MicroTCA filler module with air baffle, full-size single | 21850-105 |
| MicroTCA filler module with air baffle, mid-size double | 21850-106 |
| MicroTCA filler module with air baffle, full-size double | 21850-107 |

Note

■ CAD data: Please enter part no. at www.schroff.biz/oneclick

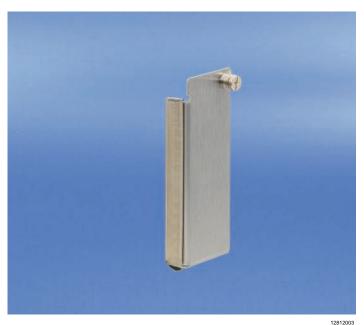


Photo shows full-size single module

MicroTCA filler modules (above an MCH)

- Shielded filler modules are used to close unused slots
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Filler module is fitted above an MCH or PM when double modules are used
- Can be screwed on; is supported on the guide rail



Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Front panel, stainless steel, 1 mm; with captive screw (1 piece) |
| 2 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |

Order Information

| Description | Part no. |
|--|-----------|
| MicroTCA filler module with front panel, mid-size single | 21850-102 |
| MicroTCA filler module with front panel, mid-size double | 21850-103 |

Note

■ CAD data: Please enter part no. at www.schroff.biz/oneclick



Photo shows AdvancedMC-Filler Modul, Single

MicroTCA filler modules, 2 HP

- Shielded filler modules are required e.g. if a mid-size or full-size AdvancedMC module is fitted in a 84 HP system
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Can be screwed on

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Front panel, stainless steel, 0.6 mm |
| 2 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |

Order Information

| Description | Qty | Part no. |
|--------------------------------------|-----------------|-----------|
| MicroTCA filler module, single, 2 HP | 1 piece (SPQ 5) | 20849-213 |
| MicroTCA filler module, double, 2 HP | 1 piece (SPQ 5) | 20849-214 |

Delivery is exclusively made in Standard Pack Quantity (SPQ): Please order at least 5 pieces or a multiple. Pricing is per individual item.

Accessories

| Pozidrive panhead screw | 24402.024 |
|---------------------------------|-----------|
| M3 x 6, zinc-plated, 100 pieces | 21102-024 |

Note

■ CAD data: Please enter part no. at www.schroff.biz/oneclick



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

RTM filler modules with air baffle

- Shielded RTM (rear transition module) filler modules are used to close unused slots and together with the air baffle prevent air short-circuits through the unused slot
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Can be screwed on; is inserted into the guide rail
- With air baffle



Delivery comprises (assembled)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Front panel with side panel and air baffle, stainless steel, 1 mm; with captive screws (2 pieces) |
| 2 | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |

Order Information

| Description | Part no. |
|---|-----------|
| RTM filler module with air baffle, mid-size double | 21850-108 |
| RTM filler module with air baffle, full-size double | 21850-109 |

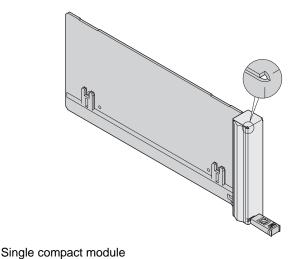


Photo shows full-size double module

12812002



Filler module ECO, single, with air baffle



Filler module ECO with fixed handle

- Shielded filler modules are used to close unused slots
- The optional air baffle (airflow adjustable) can be used to prevent an air short-circuit
- For conventional, cutaway and hybrid carriers and MicroTCA systems
- Low-cost filler module (no pull- or push-pull-handle mechanism)

NEW

NEW

Delivery comprises (assembled)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | AdvancedMC ECO filler module, consisting of |
| | 1 | Front panel, stainless steel |
| | 1 | PCB, plastic, PC, UL 94 V-0 with built-in air baffle holder |
| | 1 | Handle, fixed, plastic, PC, UL 94 V-0, black |
| | 1 | Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |
| | 1 | Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating |

Order Information

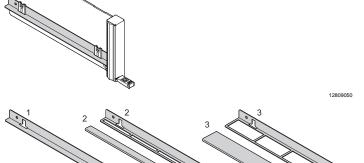
| | Part no. |
|------------------------|-----------|
| Single compact, 3 HP | 20849-348 |
| Single mid-size, 4 HP | 20849-350 |
| Single full-size, 6 HP | 20849-352 |
| Double compact, 3 HP | 20849-349 |
| Double mid-size, 4 HP | 20849-351 |
| Double full-size, 6 HP | 20849-353 |

Note

- Microswitch cannot be used
- Please order air baffle separately
- Filler modules with handle mechanism (pull- or push-pull-handles) see from page 8.63

Air baffle for filler module ECO with fixed handle

- Retrofittable; simply clip onto the PCB of the filler module
- To adjust the airflow volume the plastic cover can be individually cut to size (not for compact modules)

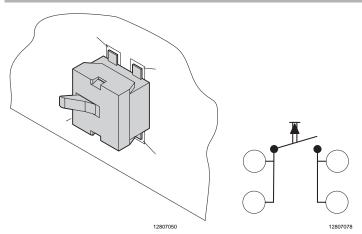


12809051

Order Information

| Oraci illiorillation | | |
|--|---|-----------|
| Air baffle for filler modul | les ECO with fixed handle | Part no. |
| For compact filler module, PU 10 pieces | Item 1: VA plate | 20849-355 |
| For mid-size filler module, PU 10 pieces | Item 2a: VA plate with ventilation slots; Item 2b: plastic cover, PVC, UL 94 V-0 | 20849-356 |
| For full-size filler module, PU 10 pieces | Item 3a: VA plate with ventilation slots; Item 3b: plastic cover, PVC, UL 94 V-0 | 20849-357 |

Systems - AdvancedMC-modules ServicePLUS



Microswitch for AdvancedMC modules

■ Microswitch for soldering (SMD)

Order Information

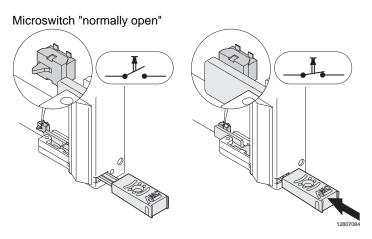
| Description | Qty/PU | Part no. |
|--|--------|-----------|
| Microswitch for AdvancedMC modules "normally open" | 10 | 20849-209 |

Technical data

| Max. switch current | 1 mA, 5 V _{DC} |
|-----------------------|----------------------------------|
| Operating temperature | -15 °C +70 °C |
| Electrical lifespan | 10 ⁵ switching cycles |



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.





modification

Custom drillings, cut-outs and special colours for off-the-shelf products

Small changes. Large impact.

- Mechanical modifications
- Ready for despatch within 10 working days



solution

Integration and custom developments

Simple. Fast. From one source.

- Customised complete solutions
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu

FRONT PANEL EXPRESS

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units . . 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Systems - CompactPCI subrack systems



12306002

What we understand to be a system

We at Schroff regard a system as being a combination of mechanical components like a subrack or case with electronic components such as a backplane and power supply unit, a cooling unit where appropriate and a system management module.

A strong standard range

Our extensive and highly-developed standard range offers you mechanical, electronic and thermal components in an almost unlimited variety of dimensions and specifications. Simply select a complete ready system or configure your system from our standard components, online or using the catalogue, to your exact requirements.

Flexibility for modifications

Often only small adjustments are needed to create the required solution from a standard product. And we have set ourselves up to offer just that. We can make modifications in accordance with your individual specifications - with our usual speed and reliability.

Competent with new developments

If your requirements cannot be met with standard products or modified standard solutions, our qualified and experienced team will create a customised solution for your system. We have all the necessary development and manufacturing competencies gathered under one roof.

Standards/Approvals

- Inner and outer dimensions in accordance with: IEC 60297-3-101 / IEEE 1101.1 IEC 60297-3-102 / IEEE 1101.10/11 IEC 60297-3-103
- Ingress protection IP 20 in accordance with IEC 60529
- EMC testing in accordance with IEC 61587-3
- In accordance with PICMG 2.0 rev. 3.0, PICMG 2.16 and PXI 2.0

Areas of application

- Measurement, control and instrumentation technology
- Automation technology, machine monitoring
- Aerospace
- Defence systems
- Medical technology
- Telecommunications





User manuals and technical documentation at www.schroff.biz/oneclick
Enter part number

Appendix 12



Downloads and further important information can be found on the Internet under www.schroff.biz

Systems - CompactPCI subrack systems

Overview 8.68

CompactPCI subrack and case systems

- Large selection of standard CompactPCI, PSB and H.110 systems
- Standard systems to the new CompactPCI PlusIO and **CompactPCI Serial standards**
- Individual configuration within 9 working days
- Custom solutions on request



CompactPCI Serial

CompactPCI Serial (PICMG CPCI-S.0) is a systematic further development of CompactPCI. Instead of the former PCI bus, this defines the current and future serial protocols for data transmission. In addition to PCIe, S-ATA, USB 2.0 & 3.0 and Ethernet are also available on every slot.

CompactPCI Serial 4 U, 9 slot 8.70



CompactPCI PlusIO

CompactPCI PlusIO (PICMG 2.30) defines a unified pinout for the fast serial PCIe, S-ATA, USB and Ethernet protocols on the 32-bit CompactPCI system slot. Hybrid CompactPCI/CompactPCI Serial systems can be built. CompactPCI PlusIO thus offers simple migration to the new technology.

CompactPCI PlusIO 4 U, 8 slot 8.73

CompactPCI

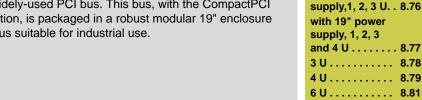
with ATX power

subrack systems



CompactPCI

CompactPCI (PICMG 2.0) was specified in 1995 and is based on the widely-used PCI bus. This bus, with the CompactPCI specification, is packaged in a robust modular 19" enclosure and is thus suitable for industrial use.





PSB

PSB (Packet Switching Backplane, PICMG 2.16) and H.110 (Computer Telephony Bus, PICMG 2.5) are CompactPCI sub-specifications that define additional buses, specifically for telecommunications applications, in 6 U CompactPCI.

Subracks

30407004

CompactPCI subracks for building an individual CompactPCI system can be found in the subracks section, page 6.14

4 U 8.84 7 U 8.85 **PSB** plug-in units 4 U 8.86 10 U 8.87 **Subracks** Kit, shielded,

rear I/O 6.14

ServicePLUS . . 8.112

6 + 1 U 8.82

CompactPCI

case systems

with/without



ServicePLUS from page 8.112

e.g. individual configuration and assembly

e.g. modifications (integration)

e.g. downloads (CAD drawings, user manuals, test reports)

e.g. custom solutions

www.schroff.biz/ServicePLUS

Main Catalogue E 10/2012



4 U, 9 slot, without rear I/O, with ATX PSU

- System for vertical board mounting with board format Front: 3 U, 160 mm deep, 9 slot
- - 9 slot, 3 U, CompactPCI Serial



- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount Slim-Line DVD and hard disk drives

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, AI; perforated top cover and base plate; front handles |
| 2 | 9 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 1 | Backplane for 3 U boards; 9 slot CompactPCI Serial (single star topology, part no. 23007-612) |
| 4 | 1 | ATX PSU 300 W, 32 HP; wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan |
| 5 | 1 | Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fan |
| 6 | 1 | Module to accomodate a slimline DVD drive unit |
| 7 | 1 | 3 U, 8 HP module to accommodate a hard disk drive |
| 8 | 1 | Front panel, front, 3 U, 8 HP |
| 9 | 1 | Front panel, rear, 3 U, 84 HP |
| 10 | 1 | Cable harness to connect all system components |

10 9 12310050

Phys. Slot 🛧 -2

Order Information

| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|-------------|--------------|-------------|-------------|-----------------|-----------|--|--|
| 4 | 177 | 84 | 275 | 9 | 24579-415 | | |
| Accesso | Accessories | | | | | | |
| Equipme | Page 3.38 | | | | | | |
| Front par | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front par | Page 7.32 | | | | | | |
| Fan cont | Page 8.108 | | | | | | |

- Modified systems available on request
- System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG CPCI-S.0



For further information www.schroff.biz/oneclick oneClick search code = Part no.

Backplane topology



ServicePLUS see page 8.112





4 U, 9 slot, with rear I/O and **ATX PSU**

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep, 9 slot
 - Rear, rear I/O: 3 U, 80 mm deep, 8 slot
- Backplane
 - 9 slot, 3 U, CompactPCI Serial



- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount Slim-Line DVD and hard disk drives

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, Al; perforated top cover and base plate; front handles |
| 2 | 9 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) |
| 4 | 1 | Backplane for 3 U boards; 9 slot CompactPCI Serial (single star topology, part no. 23007-614) |
| 5 | 1 | ATX PSU 300 W, 32 HP; wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan |
| 6 | 1 | Hot-swap fan tray, extractable, 1 U, 2 \times 12 V _{DC} fan |
| 7 | 1 | Module to accomodate a slimline DVD drive unit |
| 8 | 1 | 3 U, 8 HP module to accommodate a hard disk drive |
| 9 | 1 | Front panel, front, 3 U, 8 HP |
| 10 | 1 | Front panel, rear, 3 U, 4 HP |
| 11 | 1 | Front panel, rear, 3 U, 48 HP |
| 12 | 1 | Cable harness to connect all system components |

11 12 10 5 3

Order Information

Height

| U | mm | HP | mm | slots | |
|----------|------------|----|-----|-------|-----------|
| 4 | 177 | 84 | 275 | 9 | 24579-420 |
| Accesso | ories | | | | |
| Equipme | ent cables | | | | Page 3.38 |
| Front pa | nels | | | | Page 7.5 |
| Modules | Page 8.110 | | | | |
| Front pa | Page 7.32 | | | | |
| Fan con | Page 8.108 | | | | |
| | | | | | |

Depth

Number of

Part no.

Note

Height

■ Modified systems available on request

Width

System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG CPCI-S.0



For further information www.schroff.biz/oneclick oneClick search code = Part no.

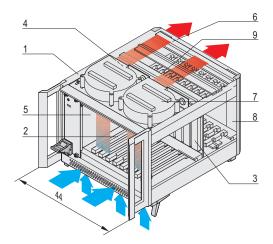
Backplane topology

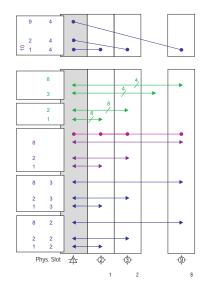


ServicePLUS see page 8.112









4 U, 9 slot, 44 HP, without rear I/O, with 19" PSU

- System for vertical board mounting with board format
 Front: 3 U, 160 mm deep, 9 slot
- Backplane
 - 9 slot, 3 U, CompactPCI Serial



- 19" PSU, 250 W, 3 U, 8 HP
- Heat dissipation by two radial fans, from front to rear

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016 |
| 2 | 9 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 1 | Backplane for 3 U boards; 9 slot CompactPCI Serial (part no. 23007-612) |
| 4 | 1 | Power backplane, 3 U, 8 HP with 1 x P47 connector (part no. 23098-105) |
| 5 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>) |
| 6 | 1 | AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 Hz, max. current 10 A |
| 7 | 2 | Radial fan, 36 m ³ /h each, free blowing |
| 8 | 1 | Front panel, rear, 3 U, 36 HP |
| 9 | 1 | Cable harness to connect all system components |

Order Information

| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|-------------|--------------|-------------|-------------|-----------------|-----------|--|--|
| 4 | 177 | 44 | 275 | 9 | 24579-606 | | |
| Accesso | Accessories | | | | | | |
| Equipme | Page 3.38 | | | | | | |
| Front par | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front par | Page 7.32 | | | | | | |
| Fan cont | Page 8.108 | | | | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG CPCI-S.0



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Backplane topology



ServicePLUS see page 8.112





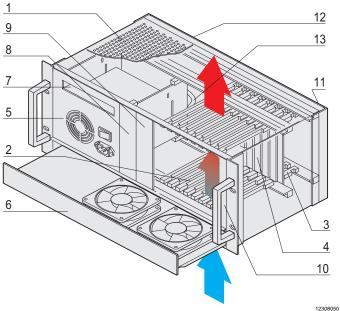
4 U, 8 slot, with rear I/O, **ATX PSU**

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep, 8 slot
 - Rear, rear I/O: 3 U, 80 mm deep, 3 slot
- Backplane
 - 4 slot, 3 U, 32 bit, CompactPCI
 - 4 slot, 3 U, CompactPCI PlusIO
 - Power Backplane

■ ATX PSU, 300 W

■ Heat dissipation by 1 U hot-swap fan unit, from bottom to top

■ Option to mount a slimline DVD drive and hard disk



3 4 10

Delivery comprises (completely assembled, wired and tested)

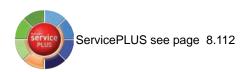
| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, AI; perforated top cover and base plate; front handles |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 3 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) |
| 4 | 1 | Backplane for 3 U boards; 8 slots comprising 4 slots 32-bit CompactPCI plus 4 slots CompactPCI PlusIO (PICMG 2.30, part no. 23007-601) |
| 5 | 1 | ATX power supply, 300 W; 32 HP wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan |
| 6 | 1 | Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fan |
| 7 | 1 | Module to accomodate a slimline DVD drive unit |
| 8 | 1 | 3 U, 8 HP module to accommodate a hard disk drive |
| 9 | 1 | Front panel, front, 3 U, 8 HP |
| 10 | 1 | Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP |
| 11 | 1 | Front panel, rear, 3 U, 24 HP |
| 12 | 1 | Front panel, rear, 3 U, 48 HP |
| 13 | 1 | Cable harness to connect all system components |

Order Information

| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|----------------|--------------|-------------|-------------|--------------------|-----------|--|--|
| 4 | 177 | 84 | 275 | 8 | 24579-405 | | |
| Accesso | Accessories | | | | | | |
| Equipme | Page 3.38 | | | | | | |
| Front par | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front par | Page 7.32 | | | | | | |
| Fan cont | Page 8.108 | | | | | | |

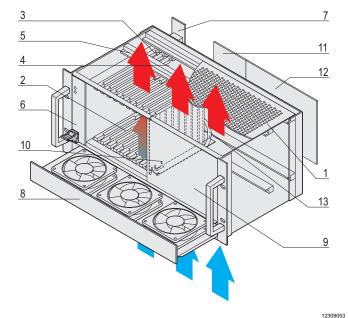
- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

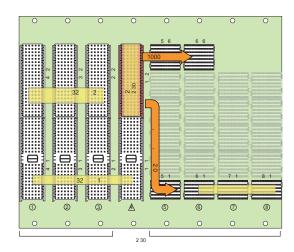
Backplane topology











Backplane topology

Main Catalogue

E 10/2012



ServicePLUS see page 8.112



12409051

4 U, 8 slot, with rear I/O, 19"-compatible PSU

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep, 8 slot
 - Rear, rear I/O: 3 U, 80 mm deep, 3 slot
- Backplane
 - 4 slot, 3 U, 32 bit, CompactPCI
 - 4 slot, 3 U, CompactPCI PlusIO
 - Power backplane
- 19"-compatible PSU, 250 W, 3 U, 8 HP
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top

NEW

■ Option to mount a hard disk

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, Al; perforated top cover and base plate; front handles |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 3 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) |
| 4 | 1 | Backplane for 3 U boards; 8 slots comprising 4 slots 32-bit CompactPCI plus 4 slots CompactPCI PlusIO (PICMG 2.30, part no. 23007-601) |
| 5 | 1 | Power backplane, 3 U, 8 HP with 1 x P47 connector (part no. <u>23098-105</u>) |
| 6 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP, part no. <u>13100-141</u>) |
| 7 | 1 | AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A |
| 8 | 1 | Hot-swap fan tray, extractable, 1 U, 3 x 12 V_{DC} fans |
| 9 | 1 | Front panel front, 3 U, 44 HP |
| 10 | 1 | Air baffle, 3 U, 160 mm deep |
| 11 | 1 | Front panel, rear, 3 U, 60 HP |
| 12 | 1 | Front panel, rear, 3 U, 4 HP |
| 13 | 1 | Cable harness to connect all system components |

Order Information

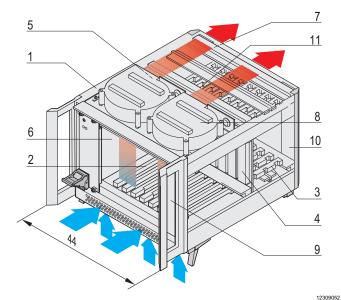
| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|-------------|--------------|-------------|-------------|-----------------|-----------|--|--|
| 4 | 177 | 84 | 275 | 8 | 24579-400 | | |
| Accesso | Accessories | | | | | | |
| Equipme | Page 3.38 | | | | | | |
| Front par | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front par | Page 7.32 | | | | | | |
| Fan cont | Page 8.108 | | | | | | |

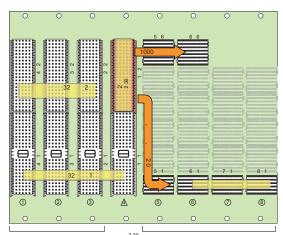
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

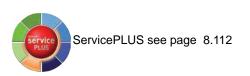








Backplane topology





12409051

4 U, 8 slot, 44 HP, with rear I/O

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear I/O: 3 U, 80 mm deep, 3 slot
- Backplane
 - 4 slot, 3 U, 32 bit, CompactPCI
 - 4 slot, 3 U, CompactPCI PlusIO
 - Power Backplane
- 19" PSU, 250 W, 3 U, 8 HP
- Heat dissipation by two radial fans, from front to rear

Delivery comprises (completely assembled, wired and tested)

NEW

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016 |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted at bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 3 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted at bottom), for vertical rear I/O boards (3 U, 80 mm deep) |
| 4 | 1 | Backplane for 3 U boards; 8 slots comprising 4 slots 32-bit CompactPCI plus 4 slots CompactPCI PlusIO (PICMG 2.30, part no. 23007-601) |
| 5 | 1 | Power backplane, 3 U, 8 HP with 1 x P47 connector part no. <u>23098-105</u>) |
| 6 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>) |
| 7 | 1 | AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A |
| 8 | 2 | Radial fan, 36 m ³ /h each, free blowing |
| 9 | 1 | Front panel, front, 3 U, 4 HP, removable |
| 10 | 1 | Front panel, rear, 3 U, 24 HP |
| 11 | 1 | Cable harness to connect all system components |

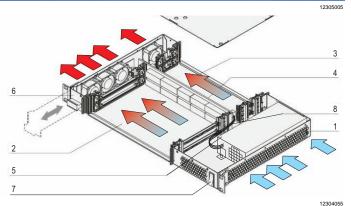
| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|-------------|---------------------------|-------------|-------------|-----------------|-----------|--|--|
| 4 | 177 | 44 | 275 | 8 | 24579-605 | | |
| Accessor | Accessories | | | | | | |
| Equipme | Page 3.38 | | | | | | |
| Front par | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front par | Page 7.32 | | | | | | |
| Fan conti | Fan control modules (FCM) | | | | | | |

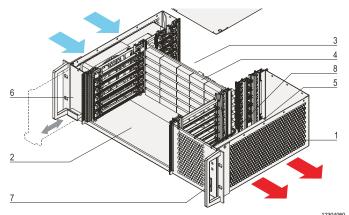
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30









Systems, 1, 2, 3 U, with rear I/O and ATX PSU

- System for horizontal board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane: 2, 4, 6 slot, 64 bit; system slot on left
- ATX PSU
- Heat dissipation by extractable hot-swap fan unit; in 1 U system from right to left; in 2 and 3 U systems from left to right



Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, St, powder-coated, black, RAL 9005 |
| 2 | 1 | Number of front slots see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted to front left), for horizontal board mounting (6 U, 160 mm deep) |
| 3 | 1 | Number of rear slots see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted to front left), for horizontal mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane for 6 U boards, for number of slots see Order Information, 64 bit; system slot on the left |
| 5 | 1 | ATX PSU, wide input range 100 240 V _{AC} (rating data see Order Information); IEC plug, switch (controls DC power only), LED (Power ON); Fan |
| 6 | 1 | Hot-swap fan unit, number of fans see Order Information |
| 7 | 1 | Mains switch |
| 8 | 1 | Cable harness to connect all system components |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Order Information

| Hei | ght | Depth | Backplane | Fan unit | Power supply | Part no. |
|-----|--------|-------|-------------|----------------|---|-----------|
| U | mm | mm | Slots | Number of fans | | |
| 1 | 43.65 | 275 | 2 slot, 6 U | 4 | ATX 250 W, 3.3 V/14 A, 5 V/23 A, 12 V/16 A, -12 V/0.5 A | 24579-077 |
| 2 | 88.10 | 275 | 4 slot, 6 U | 2 | ATX 250 W, 3.3 V/14 A, 5 V/20 A, 12 V/16 A, -12 V/0.8 A | 24579-081 |
| 3 | 132.55 | 275 | 6 slot, 6 U | 1 *) | ATX 300 W, 3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A | 24579-079 |

*) Systems with additional heat dissipation in rear I/O space for 3 U systems available on request

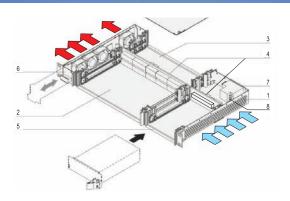


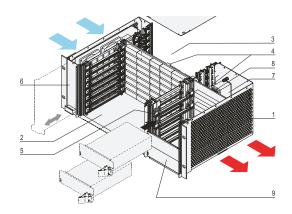
ServicePLUS see page 8.112



| Accessories | |
|------------------------------|------------|
| Equipment cables | Page 3.38 |
| Front panels | Page 7.5 |
| Modules to mount drive units | Page 8.110 |
| Front panels with handle | Page 7.32 |
| Fan control modules (FCM) | Page 8.108 |







Systems, 1, 2, 3, 4 U, with rear I/O, for 19" PSU

- System for horizontal board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Monolithic backplane for signals and power
 - 2, 4, 6, 8 slot, 6 U, 64 bit; system slot on left
 - Power plug to PICMG 2.11 (P 47)
- Prepared for installation of 19" CompactPCI PSUs (3 U, 8 HP)
- Heat dissipation by extractable hot swap fan unit; 1 U system from right to left; in 2, 3 and 4 U systems from left to right

Delivery comprises (completely assembled, wired and tested)

| ltem | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, St, powder-coated, black, RAL 9005 |
| 2 | 1 | Number of slots to front see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted front right), for horizontal board mounting (6 U, 160 mm deep) |
| 3 | 1 | Number of rear slots see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted front right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Monolithic backplane for 6 U boards and voltage supply, for number of slots see Order Information, 64 bit; system slot left, in accordance with PICMG 2.0 rev. 3.0, voltage supply: 1 x P 47 socket for 1 U, 2 x P 47 socket for 2, 3, 4 U |
| 5 | 1 | Installation space for 19" CompactPCI power supply unit (3 U, 8 HP; For quantity see Order Information) |
| 6 | 1 | Hot-swap fan unit, number of fans see Order Information |
| 7 | 1 | AC input (IEC plug), mains filter module, fuse, mains switch |
| 8 | 1 | Cable harness to connect all system components |
| 9 | 1 | 3 U, 8 HP front panel, mounted at front, from 2 U system |

Note

12304056

- Modified systems available on request
- 48 V_{DC} version on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

Order Information

| Height | Height | Depth | Backplane | Fan unit | Power supply | Quantity | Part no. |
|----------|----------------|---------------|---------------------|-----------------------|---------------------------|----------------|-----------|
| U | mm | mm | Slots | Number of fans | (please order separately) | Connector type | |
| 1 | 43.65 | 275 | 2 slot, 6 U | 4 | 1 | 1 x P 47 | 24579-078 |
| 2 | 88.10 | 275 | 4 slot, 6 U | 2 | 2 | 2 x P 47 | 24579-082 |
| 3 | 132.50 | 275 | 6 slot, 6 U | 1 *) | 2 3 | 2 x P 47 | 24579-080 |
| 4 | 177.00 | 275 | 8 slot, 6 U | 4 *) | 2 4 | 2 x P 47 | 24579-106 |
| 19" comp | atible power : | supply, 250 W | I, 3 U, 8 HP Please | order PSU separately, | see page 9.22 | | 13100-141 |

^{*)} Systems with additional heat dissipation in rear I/O space for 3 U and 4 U systems available on request





| Accessories | |
|------------------------------|------------|
| Equipment cables | Page 3.38 |
| Front panels | Page 7.5 |
| Modules to mount drive units | Page 8.110 |
| Front panels with handle | Page 7.32 |
| Fan control modules (FCM) | Page 8.108 |



12 11 5 6 10 7 8 2 9





System, 3 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit; system slot on right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by convection, upward from below
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description | | | | |
|------|-----|---|--|--|--|--|
| 1 | 1 | Shielded 19" chassis, AI; perforated top cover and base plate; 2 front handles | | | | |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted bottom front), for vertical boards (3 U, 160 mm deep) | | | | |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted bottom), for vertical rear I/O boards (3 U, 80 mm deep) | | | | |
| 4 | 1 | Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used) | | | | |
| 5 | 1 | ATX power supply; 300 W; 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan | | | | |
| 6 | 1 | Module to accomodate a slimline DVD drive unit | | | | |
| 7 | 1 | 3 U, 8 HP module to accommodate a hard disk drive | | | | |
| 8 | 1 | Front panel front, 3 U, 8 HP | | | | |
| 9 | 1 | Front panel, front, 3 U, 4 HP, to expand system slot to 8 HP | | | | |
| 10 | 1 | Front panel, rear, 3 U, 4 HP | | | | |
| 11 | 1 | Front panel, rear, 3 U, 48 HP | | | | |
| 12 | 1 | Cable harness to connect all system components | | | | |

Order Information

| Height | Height | Depth | Number of | Part no. |
|--------------------------|-----------------------|--------------------------|----------------------|------------|
| U | mm | mm | slots | |
| 3 | 132.55 | 275 | 8 | 24579-031 |
| Accessorie | s | | | |
| DC fan 12 V 1 piece | , air flow volui | me 140 m ³ /ł | n, 119 x 119 x 32 mm | 60713-600 |
| Fan retaine 1 piece | r for 119 x 11 | 9 x 32 mm | fan, (E)PB foam, | 24579-212 |
| Fan tray, 1 lassembled v | 24579-105 | | | |
| Air filter con | 24579-033 | | | |
| Equipment | cables | | | Page 3.38 |
| Front panel | Page 7.5 | | | |
| Modules to | Page 8.110 | | | |
| Front panel | s with handl | е | | Page 7.32 |
| Fan control | modules (F | CM) | | Page 8.108 |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



12 9 8 7 11 11 5 2 6





System, 4 U, 8 slot, with rear I/O, ATX frame PSU

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit; system slot on right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, upward from below
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" chassis, AI; perforated top cover and base plate; front handles |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) |
| 4 | 1 | Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used) |
| 5 | 1 | ATX power supply, 300 W; 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan |
| 6 | 1 | Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fans |
| 7 | 1 | Module to accomodate a slimline DVD drive unit |
| 8 | 1 | Module to accomodate a CD ROM drive, 3 U, 8 HP |
| 9 | 1 | Front panel, front, 3 U, 8 HP |
| 10 | 1 | Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP |
| 11 | 1 | Front panel, rear, 3 U, 4 HP |
| 12 | 1 | Front panel, rear, 3 U, 48 HP |
| 13 | 1 | Cable harness to connect all system components |

Order Information

| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | | | | | |
|-------------|--------------|-------------|-------------|---------------------------|-----------|--|--|--|--|--|--|
| 4 | 177 | 84 | 275 | 8 | 24579-250 | | | | | | |
| Accesso | ries | | | | | | | | | | |
| Air filter | 24579-033 | | | | | | | | | | |
| Equipme | Page 3.38 | | | | | | | | | | |
| Front pa | Page 7.5 | | | | | | | | | | |
| Modules | Page 8.110 | | | | | | | | | | |
| Front pa | Page 7.32 | | | | | | | | | | |
| Fan cont | rol module | es (FCM) | | Fan control modules (FCM) | | | | | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30





1 5 15 16 9 6 11 12 8 4 4 13 2





System, 4 U, 8 slot, with rear I/O, 19"-compatible PSU

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit; system slot on right
 - 8 HP wide CPU can be used, power backplane
- 19"-compatible PSU, 250 W, 3 U, 8 HP
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount a hard disk

Delivery comprises (completely assembled, wired and tested)

| Item Qty Description | | | | | | |
|----------------------|----|---|---|--|--|--|
| | 1 | 1 | Shielded 19" chassis, Al; perforated top cover and base plate; front handles | | | |
| - | 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) | | | |
| | 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) | | | |
| • | 4 | 1 | Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used) | | | |
| | 5 | 1 | Power backplane, 3 U, 8 HP with 1 x P47 plug | | | |
| | 6 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>) | | | |
| • | 7 | 2 | AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A | | | |
| - | 8 | 1 | Hot-swap fan tray, extractable, 1 U, 3 x 12 V _{DC} fans | | | |
| | 9 | 1 | Front panel front, 3 U, 8 HP | | | |
| | 10 | 1 | 3 U, 8 HP module to accommodate a hard disk drive | | | |
| | 11 | 1 | Front panel front, 3 U, 24 HP | | | |
| | 12 | 1 | Air baffle, 3 U, 160 mm deep | | | |
| | 13 | 1 | Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP | | | |
| | 14 | 1 | Front panel, rear, 3 U, 4 HP | | | |
| | 15 | 1 | Front panel, rear, 3 U, 40 HP | | | |
| _ | 16 | 1 | Cable harness to connect all system components | | | |

Order Information

| Oluei II | iioiiiiatic | / 11 | | | | | | |
|-------------|--------------------------|-------------|-------------|-----------------|-----------|--|--|--|
| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | | |
| 4 | 177 | 84 | 275 | 8 | 24579-260 | | | |
| Accessories | | | | | | | | |
| Air filter | nat, PU 1 set | 24579-033 | | | | | | |
| Equipme | Page 3.38 | | | | | | | |
| Front par | Page 7.5 | | | | | | | |
| Modules | Page 8.110 | | | | | | | |
| Front par | Front panels with handle | | | | | | | |
| Fan cont | Page 8.108 | | | | | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



10 11 11 5 7 2 8





6 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane
 - 8 slot, 6 U, 64 bit; system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by convection, from bottom to top
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" chassis, Al; perforated top cover and base plate; 2 front handles |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane for 6 U boards; 8 slot, 64 bit (part no. 23006-868); system slot on right, 4 HP (8 HP wide CPU can be used) |
| 5 | 1 | ATX power supply, 300 W, 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan |
| 6 | 1 | Module to accomodate a 5.25" DVD drive |
| 7 | 1 | Front panel, front, 6 U, 16 HP |
| 8 | 1 | Front panel, front, 6 U, 4 HP, removable, to expand system slot to 8 HP |
| 9 | 1 | Front panel, rear, 6 U, 4 HP |
| 10 | 1 | Front panel, rear, 6 U, 48 HP |
| 11 | 1 | Cable harness to connect all system components |

Order Information

| U mm mm slots 6 265.9 275 8 24579-030 Accessories DC fan 12 V, air flow volume 140 m³/h, 119 x 119 x 32 mm, 1 piece Fan retainer for 119 x 119 x 32 mm fan, (E)PB foam, 1 piece Fan tray, 1 U for 3 or 6 U CompactPCI systems (boards assembled vertically), 1 piece 24579-105 | Height | Height | Depth | Number of | Part no. |
|---|--------------------|--------------|------------------------|-----------|------------|
| Accessories DC fan 12 V, air flow volume 140 m³/h, 119 x 119 x 32 mm, 1 piece Fan retainer for 119 x 119 x 32 mm fan, (E)PB foam, 1 piece Fan tray, 1 U for 3 or 6 U CompactPCI systems (boards 24579-105 | U | mm | mm | slots | |
| DC fan 12 V, air flow volume 140 m ³ /h, 119 x 119 x 32 mm, 1 piece Fan retainer for 119 x 119 x 32 mm fan, (E)PB foam, 1 piece Fan tray, 1 U for 3 or 6 U CompactPCI systems (boards 24579-105 | 6 | 265.9 | 275 | 8 | 24579-030 |
| 119 x 119 x 32 mm, 1 piece Fan retainer for 119 x 119 x 32 mm fan, (E)PB foam, 1 piece Fan tray, 1 U for 3 or 6 U CompactPCI systems (boards 24579-105 | Accessories | | | | |
| 1 piece 24579-212 Fan tray, 1 U for 3 or 6 U CompactPCI systems (boards 24579-105 | | | 140 m ³ /h, | | 60713-600 |
| 24579-105 | | 24579-212 | | | |
| | • | 24579-105 | | | |
| Air filter consisting of filter holder and filter mat, PU 1 set 24579-033 | Air filter cons | 24579-033 | | | |
| Equipment cables Page 3.38 | Equipment c | Page 3.38 | | | |
| Front panels Page 7.5 | Front panels | Page 7.5 | | | |
| Modules to mount drive units Page 8.110 | Modules to n | Page 8.110 | | | |
| Front panels with handle Page 7.32 | Front panels | Page 7.32 | | | |
| Fan control modules (FCM) Page 8.108 | Fan control r | modules (FCM |) | | Page 8.108 |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



11 8 12 10 10 10 10 4 9





System, 7 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane
 - 8 slot, 6 U, 64 bit, system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" chassis, Al; perforated top cover and base plate; Front handles |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane for 6 U boards; 8 slot, 64 bit (part no. 23006-868; system slot on right, 4 HP (8 HP wide CPU can be used) |
| 5 | 1 | ATX power supply, 300 W, 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan |
| 6 | 1 | Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fans |
| 7 | 1 | Module to accomodate a 5.25" DVD drive |
| 8 | 1 | Front panel, front, 6 U, 16 HP |
| 9 | 1 | Front panel, front, 6 U, 4 HP, removable, to expand system slot to 8 HP |
| 10 | 1 | Front panel, rear, 6 U, 4 HP |
| 11 | 1 | Front panel, rear, 6 U, 48 HP |
| 12 | 1 | Cable harness to connect all system components |

Order Information

| Height | Height | Depth | Number of | Part no. | | | | |
|---------------|-------------|-------|-----------|-----------|--|--|--|--|
| U | mm | mm | slots | | | | | |
| 7 | 310.35 | 275 | 8 | 24579-026 | | | | |
| Accessorie | Accessories | | | | | | | |
| Air filter co | 24579-033 | | | | | | | |
| Equipmen | Page 3.38 | | | | | | | |
| Front pane | Page 7.5 | | | | | | | |
| Modules to | Page 8.110 | | | | | | | |
| Front pane | Page 7.32 | | | | | | | |
| Fan contro | Page 8.108 | | | | | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



Systems - CompactPCI case systems



5 1 1 8 8 10 2 9





System, 4 U, 8 slot, 44 HP, with rear I/O

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit, system slot on right
 - 8 HP wide CPU can be used



- 19" PSU, 250 W, 3 U, 8 HP
- Heat dissipation by two radial fans, from front to rear

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description | | | | |
|------|-----|---|--|--|--|--|
| 1 | 1 | ratiopacPRO-air case, RAL 9006, shielded, perforated a inlet/exhaust openings front and rear; front handles RAL 7016 | | | | |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) | | | | |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) | | | | |
| 4 | 1 | Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used) | | | | |
| 5 | 1 | Power backplane, 3 U, 8 HP with 1 x P47 plug | | | | |
| 6 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; Part no. <u>13100-141</u>) | | | | |
| 7 | 1 | AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A | | | | |
| 8 | 2 | Radial fan, 36 m ³ /h each, free blowing | | | | |
| 9 | 1 | Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP | | | | |
| 10 | 1 | Front panel, rear, 3 U, 4 HP | | | | |
| 11 | 1 | Cable harness to connect all system components | | | | |

Order Information

| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|-------------|----------------------------|-------------|-------------|--------------------|------------|--|--|
| 4 | 177 | 44 | 275 | 8 | 24579-604 | | |
| | | 44 | 210 | 0 | 24379-004 | | |
| Accesso | ries | | | | | | |
| Equipme | Equipment cables Page 3.38 | | | | | | |
| Front pa | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front pa | Page 7.32 | | | | | | |
| Fan cont | rol module | es (FCM) | | | Page 8.108 | | |

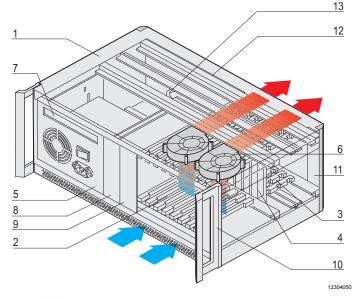
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.0 rev. 3.0



Systems - CompactPCI case systems







Open Modular Computing Specifications



ServicePLUS see page 8.112

System, 4 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit, system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by two radial fans, front to rear
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description | | | | | |
|------|-----|---|--|--|--|--|--|
| 1 | 1 | ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016 | | | | | |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep) | | | | | |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep) | | | | | |
| 4 | 1 | Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used) | | | | | |
| 5 | 1 | ATX power supply, 300 W, wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan; 32 HP | | | | | |
| 6 | 2 | Radial fan, 36 m ³ /h each, free blowing | | | | | |
| 7 | 1 | Module to accomodate a slimline DVD drive unit | | | | | |
| 8 | 1 | 3 U, 8 HP module to accommodate a hard disk drive | | | | | |
| 9 | 1 | Front panel, front, 3 U, 8 HP | | | | | |
| 10 | 1 | Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP | | | | | |
| 11 | 1 | Front panel, rear, 3 U, 4 HP | | | | | |
| 12 | 1 | Front panel, rear, 3 U, 48 HP | | | | | |
| 13 | 1 | Cable harness to connect all system components | | | | | |

Order Information

| Height | Height | Depth | Number of | Part no. |
|------------|------------|-------|-----------|-----------|
| U | mm | mm | slots | |
| 4 | 177 | 275 | 8 | 24579-602 |
| Accessori | | | | |
| Spare fan | 24579-225 | | | |
| Equipmen | Page 3.38 | | | |
| Front pane | Page 7.5 | | | |
| Modules to | Page 8.110 | | | |
| Front pane | Page 7.32 | | | |
| Fan contro | Page 8.108 | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.0 rev. 3.0

Systems - CompactPCI case systems







ServicePLUS see page 8.112

Systems, 7 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane
 - 8 slot, 6 U, 64 bit, system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by two radial fans, from front to rear
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016 |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane for 6 U boards; 8 slot, 64 bit (part no. 23006-868); system slot on right, 4 HP (8 HP wide CPU can be used) |
| 5 | 1 | ATX power supply, 300 W, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC-plug; mains switch; fan; 32 HP |
| 6 | 2 | Radial fan, 36 m ³ /h each, free blowing |
| 7 | 1 | Module to accomodate a 5.25" DVD drive |
| 8 | 1 | Front panel, front, 6 U, 16 HP, for fitting a hard disk drive |
| 9 | 1 | Front panel, front, 6 U, 4 HP, removable, to expand width of system slot to 8 HP |
| 10 | 1 | Front panel, rear, 6 U, 4 HP |
| 11 | 1 | Front panel, rear, 6 U, 48 HP |
| 12 | 1 | Cable harness to connect all system components |

Order Information

| Height | Height | Depth | Number of | Part no. |
|-------------|-------------|-------|-----------|------------|
| U | mm | mm | slots | |
| 7 | 310.35 | 275 | 8 | 24579-612 |
| Accessorie | s | | | |
| Spare fan u | 24579-225 | | | |
| Equipment | Page 3.38 | | | |
| Front panel | Page 7.5 | | | |
| Modules to | Page 8.110 | | | |
| Front panel | Page 7.32 | | | |
| Fan control | modules (FC | CM) | | Page 8.108 |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.0 rev. 3.0



Systems - CompactPCI subrack systems, telecoms



3 4 8 7





System, 4 U, 8 slot, with rear I/O, for telecoms applications

- System for horizontal board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Monolithic backplane for (signals and power) 64-bit CompactPCI; PSB (Package Switched Backplane), PICMG 2.16; H.110
 - 8 slot, 6 U, 64 bit CompactPCI (2 fabric/switch slots, 6 node slots H.110), system slot to left
 - Integrated power backplane with 2 x P 47 connectors
- Prepared to accept two 19" CompactPCI PSUs 250 W (3 U, 8 HP)
- Heat dissipation by extractable hot-swap fan unit, from left to right

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, St, powder-coated, black, RAL 9005 |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front right), for horizontal board mounting (6 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane for 6 U boards and voltage supply (2 x P 47 sockets); 64-bit CompactPCI; PSB, 2 fabric/switch slots; 6 node H.110 bus slots; part no. 23006-611 |
| 5 | - | Prepared to accommodate two 19" CompactPCI PSUs (250 W, 3 U, 8 HP), part no. 13100-141 |
| 6 | 1 | Hot-swap fan unit, 4 fans, each 109 m ³ /h (64 cfm) |
| 7 | 1 | AC input (IEC plug), mains filter module, fuse, mains switch |
| 8 | 1 | Cable harness to connect all system components |
| 9 | 2 | Front panel front, 3 U, 8 HP |

Order Information

| Height U | Height mm | Depth mm | Number of slots | Part no. | | |
|-----------------------|---|-------------|-----------------|------------|--|--|
| 4 | 177 | 275 | 8 | 24579-135 | | |
| Accessorie | es | | | | | |
| • | 19" compatible power supply, 250 W, 3 U, 8 HP Please order PSU separately, see page 9.22 | | | | | |
| Fan tray fo 7 fans | 24579-112 | | | | | |
| Equipment | Page 3.38 | | | | | |
| Front pane | Page 7.5 | | | | | |
| Modules to | Page 8.110 | | | | | |
| Front pane | Page 7.32 | | | | | |
| Fan contro | l modules (F | CM) | | Page 8.108 | | |

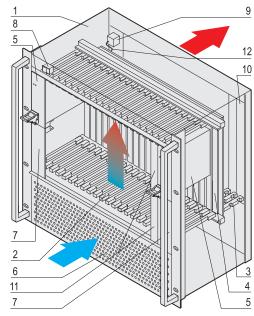
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103;
 IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.16



Systems - CompactPCI subrack systems, telecoms







Open Modular Computing Specifications



System, 10 U, 16 slot, with rear I/O, for telecoms applications

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane, PSB (package switched backplane), PICMG 2.16
 16-slot, 6 U, 64 bit (2 fabric/switch slots, 14 node slots)
- Two 19" CompactPCI power supplies, 250 W (3 U, 8 HP), prepared for installation of two further 19" compatible PSUs
- Heat dissipation by fan module, from front to rear
- Prepared for system monitoring with a chassis monitoring module (CMM)

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, Al; perforated front panel to front and rear, 19" bracket in RAL 9006; remaining parts passivated in aluminium; front handles (RAL 9005) |
| 2 | 16 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep) |
| 3 | 16 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | PSB backplane for 6 U boards, 64 bit, 2 fabric/switch slots, 14 node slots, 2 CompactPCI segments, system slot left and right; part no. 23006-610 |
| 5 | 2 | 19" compatible power supply, 250 W (3 U, 8 HP); part no. <u>13100-141</u> |
| 6 | 1 | Extractable fan unit with filter mat, 3 fans, 24 V _{DC} , 270 m ³ /h (160 cfm) |
| 7 | 2 | Front panel, front, 3 U, 8 HP, space for two further power supplies |
| 8 | 1 | DC switch on front |
| 9 | 1 | AC input (IEC connector), mains filter module, fuse, 6 U, 8 HP |
| 10 | 1 | Front panel, rear, 6 U, 8 HP |
| 11 | 2 | Front panel, front, 3 U, 4 HP, cover for optional CMM module space |
| 12 | 1 | Cable harness to connect all system components |

Order Information

| Height | Height | Depth | Number of | Part no. |
|---------------------|----------------|------------------|------------|------------|
| U | mm | mm | slots | |
| 10 | 443.7 | 275 | 16 | 24579-028 |
| Accessories | | | | |
| 19" compatib | le power supp | oly, 250 W, 3 U, | 8 HP | 13100-141 |
| Please order F | PSU separately | , see page 9.2 | 2 | 13100-141 |
| Chassis mon | itoring module | e (CMM) 3 U, 4 | HP, 160 mm | |
| deep, 1 piece | | 23207-022 | | |
| Please order F | PSU separately | , see page 8.1 | 09 | |
| Equipment ca | Page 3.38 | | | |
| Front panels | Page 7.5 | | | |
| Modules to m | Page 8.110 | | | |
| Front panels | Page 7.32 | | | |
| Fan control n | nodules (FCM) | | | Page 8.108 |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103;
 IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.16

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units . . 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Systems - VME, VME64x, VXS, VPX



10006001

What we understand to be a system

We at Schroff regard a system as being a combination of mechanical components like a subrack or case with electronic components such as a backplane and power supply unit, a cooling unit where appropriate and a system management module.

A strong standard range

Our extensive and highly-developed standard range offers you mechanical, electronic and thermal components in an almost unlimited variety of dimensions and specifications. Simply select a complete ready system or configure your system from our standard components, online or using the catalogue, to your exact requirements.

Flexibility for modifications

Often only small adjustments are needed to create the required solution from a standard product. And we have set ourselves up to offer just that. We can make modifications in accordance with your individual specifications - with our usual speed and reliability.

Competent with new developments

If your requirements cannot be met with standard products or modified standard solutions, our qualified and experienced team will create a customised solution for your system. We have all the necessary development and manufacturing competencies gathered under one roof.

Standards/certifications

- Inner and outer dimensions in accordance with: IEC 60297-3-101 / IEEE 1101.1 IEC 60297-3-102 / IEEE 1101.10/11 IEC 60297-3-103
- Ingress protection IP 20 in accordance with IEC 60529
- EMC testing in accordance with IEC 61587-3
- In accordance with VITA 1-1994 and VITA 1.1-1997

Areas of application

- Measurement, control and instrumentation technology
- Automation technology, machine monitoring
- Aerospace
- Defence technology
- Medical technology
- Test systems

0

User manual and technical documentation at www.schroff.biz/oneclick
Enter order number





Downloads and further important information can be found on the Internet under www.schroff.biz

Systems - VME, VME64x, VXS, VPX

Overview 8.88

Chassis and tower systems

- Standard systems from stock
- Individual configuration within 9 working days
- Robust mechanics, effective heat dissipation and EMC shielding



VME subrack systems

- 3 ... 8 U subrack systems, aluminium, silver
- With fan control module (FCM) for fan monitoring and control

VME subrack systems 3 U, 5 slot 8.90 4 U, 8 slot 8.91 7 U, 12 slot 8.92 8 U, 21 slot 8.93



VME64x subrack systems

- Subrack systems
 - 1, 2 U, steel, black (RAL 9005)
 - 3 ... 10 U, aluminium, silver
- With fan control module (FCM) for fan monitoring and control

VME64x subrack systems 1 U, 2 slot 8.95 2 U, 4 slot 8.96 4 U, 8 slot 8.97 7 U, 12 slot 8.98 8 U, 21 slot 8.99 10 U, 21 slot 8.100

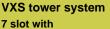


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VME64x/VXS Tower systems

- Tower systems, aluminium, RAL 9006, RAL 7016
- With fan control module (FCM) for air monitoring and control
- Chassis suitable for use as a test system

VME64x tower systems 7 slot without rear I/O 8.101 7 slot with rear I/O 8.102



rear I/O 8.103



VPX case system

- Case system, 4 U, RAL 9006, RAL 7016
- Well suited as test system

VPX case system 4 U, 5 slot 8.104



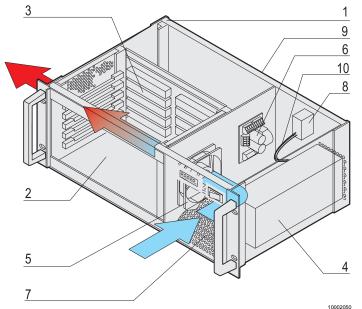
ServicePLUS from page 8.114

- e.g. individual configuration and assembly
- e.g. modifications (integration)
- e.g. downloads (CAD drawings, user manuals, test reports)
- e.g. custom solutions

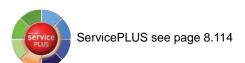
www.schroff.biz/ServicePLUS

ServicePLUS . . 8.114









3 U, 5 slot

- System for horizontal board mounting with board format
 Front: 6 U, 160 mm deep
- Backplane VME - 5 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 250 W
- Heat dissipation by 1 fan, from front to left; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description | | | | |
|------|-----|---|--|--|--|--|
| 1 | 1 | Shielded 19" chassis, Al, with perforated side panels and front handles (RAL 7016) | | | | |
| 2 | 5 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal board mounting (6 U, 160 mm deep) | | | | |
| 3 | 1 | Backplane VME for 6 U boards, 5 slots, J1/J2 monolithic (part no. <u>23001-065</u>) | | | | |
| 4 | 1 | Power supply unit, open frame; 250 W (part no. <u>11098-316</u>) | | | | |
| 5 | 1 | Fan; temperature-dependent speed control | | | | |
| 6 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>) | | | | |
| 7 | 1 | Front panel, perforated, 3 U; display module; mains switch | | | | |
| 8 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse | | | | |
| 9 | 1 | Rear panel, Al | | | | |
| 10 | 1 | Cable harness to connect all system components | | | | |

Order Information

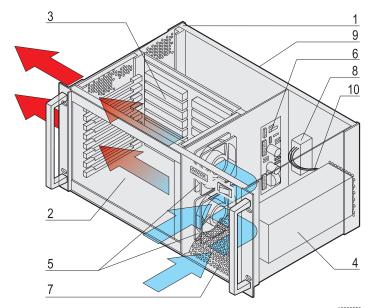
| Height U | Height mm | Depth mm | Number of slots | Part no. | | | |
|-------------|--------------|-------------|-----------------|-----------|--|--|--|
| 3 | 132.55 | 277.5 | 5 | 20836-310 | | | |
| Accessori | Accessories | | | | | | |
| Equipmen | Page 3.38 | | | | | | |
| Front pane | Page 7.5 | | | | | | |
| Modules to | Page 8.110 | | | | | | |
| Front pane | Page 7.18 | | | | | | |
| Fan contro | Page 8.108 | | | | | | |

Note

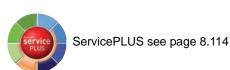
- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103;
 IEEE 1101.1, 1101.10/11;
 Backplane konform zu VITA 1.1-1994











4 U, 8 slot

- System for horizontal board mounting with board format
 Front: 6 U, 160 mm deep
- Backplane VME
 - 8 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by 2 fans, from front to left; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" chassis, Al, with perforated side panels; front handles (RAL 7016) |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal board mounting (6 U, 160 mm deep) |
| 3 | 1 | Backplane VME for 6 U boards, 8 slots, J1/J2 monolithic (part no. 23001-068) |
| 4 | 1 | Power supply unit, open frame; 444 W (400 W at < 180 V _{AC} ; part no. <u>11098-267</u>) |
| 5 | 2 | Fan; temperature-dependent speed control |
| 6 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021) |
| 7 | 1 | Front panel, perforated, 4 U; display module; mains switch |
| 8 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 9 | 1 | Rear panel, Al |
| 10 | 1 | Cable harness to connect all system components |

Order Information

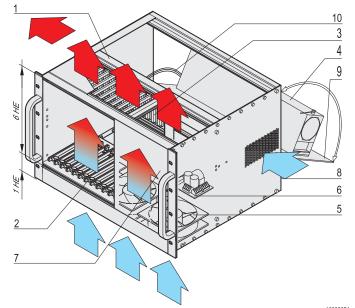
| Height U | Height mm | Depth mm | Number of slots | Part no. | | |
|-------------|--------------|-------------|-----------------|-----------|--|--|
| 4 | 177 | 277.5 | 8 | 20836-415 | | |
| Accessorie | Accessories | | | | | |
| Equipmen | Page 3.38 | | | | | |
| Front pane | Page 7.5 | | | | | |
| Modules to | Page 8.110 | | | | | |
| Front pane | Page 7.18 | | | | | |
| Fan contro | Page 8.108 | | | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103;
 IEEE 1101.1, 1101.10/11;
 Backplane konform zu VITA 1.1-1994







1 HE = 1 U





7 U, 12 slot

- System for vertical board mounting with board format
 Front: 6 U, 160 mm deep
- Backplane VME - 12 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by pull-out hot-swap fan unit, from bottom to top; filter mat; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description | | | | |
|------|-----|--|--|--|--|--|
| 1 | 1 | Shielded 19" chassis, Al; 19" bracket, with plain top cover and base plate (RAL 9006); front handles (RAL 7016) | | | | |
| 2 | 12 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep) | | | | |
| 3 | 1 | Backplane VME for 6 U boards, 12 slots, J1/J2 monolithic (part no. 23001-072) | | | | |
| 4 | 1 | Power supply unit, open frame; 444 W (400 W at < 180 V _{AC} ; part no. <u>11098-267</u>) | | | | |
| 5 | 1 | Hot-swap fan tray with 3 fans, pull-out, 1 U; air filter; temperature-dependent speed control | | | | |
| 6 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-028) | | | | |
| 7 | 1 | Front panel 6 U, 36 HP | | | | |
| 8 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse, mains switch | | | | |
| 9 | 1 | Rear panel, hinged, Al, 6 U, 84 HP | | | | |
| 10 | 1 | Cable harness to connect all system components | | | | |
| | | - | | | | |

Order Information

| Height U | Height mm | Depth mm | Number of slots | Part no. | | |
|------------------|---|-------------|--------------------|-----------|--|--|
| 7 (1 + 6) | 310.35 | 355 | 12 | 20836-715 | | |
| Accessorie | s | | | | | |
| Air filter co | Air filter consisting of filter holder and filter mat, PU 1 set | | | | | |
| Backplanes | Page 10.15 | | | | | |
| Equipment | Page 3.38 | | | | | |
| Front pane | Page 7.5 | | | | | |
| Modules to | Page 8.110 | | | | | |
| Front pane | Page 7.18 | | | | | |
| Fan contro | Page 8.108 | | | | | |

Note

30402059

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; Backplane konform zu VITA 1.1-1994

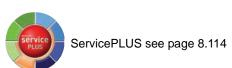




12 7 5 6 3 11 4 8 9 10 1

1 HE = 1 U





7 U, 12 slot, for transition modules

- System for vertical board mounting with board formats

 - Front: 6 U, 160 mm deepRear: 6 U, 12 HP, 80 mm deep; for transition modules
- Backplane VME
 - 12 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by 3 fans, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, Al; 19" bracket, plain top cover and base plate (RAL 9006); front handles (RAL 7016) |
| 2 | 12 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep) |
| 3 | 3 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical mounting of transition module (6 U, 80 mm deep) covered with EMC front panel 6 U / 12 HP |
| 4 | 1 | Backplane VME for 6 U boards, 12 slots, J1/J2 monolithic (part no. 23001-072) |
| 5 | 1 | Power supply unit, open frame; 444 W (400 W at < 180 V _{AC} ; part no. <u>11098-267</u>) |
| 6 | 3 | Fan; rear panel, hinged, 5 U, 84 HP; temperature-dependent speed control |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021) |
| 8 | 1 | Front panel 6 U, 36 HP |
| 9 | 1 | Display module |
| 10 | 1 | Mains switch |
| 11 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 12 | 1 | Cable harness to connect all system components |

Order Information

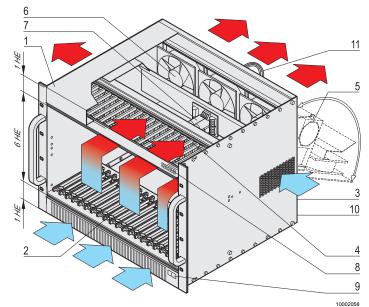
| Height U | Height mm | Depth mm | Number of slots | Part no. |
|-------------------|--------------|-------------|--------------------|-----------|
| 7 (1/2 + 6 + 1/2) | 310.35 | 355 | 12 | 20836-716 |
| Accessories | | | | |
| Backplanes | Page 10.15 | | | |
| Equipment cable | Page 3.38 | | | |
| Front panels | Page 7.5 | | | |
| Modules to mou | Page 8.110 | | | |
| Front panels wit | Page 7.18 | | | |
| Fan control mod | Page 8.108 | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IÉEE 1101.1, 1101.10/11; Backplane konform zu VITA 1.1-1994







1 HE = 1 U





8 U, 21 slot

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear: 6 U, 12 HP, 80 mm deep; for transition modules
- Backplane VME
 - 21 slot, 6 U, J1/J2 monolithic
- \blacksquare PSU, open frame, 744 W (600 W at < 180 V_{AC})
- Heat dissipation by 3 fans, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description | | | | |
|------|-----|--|--|--|--|--|
| 1 | 1 | Shielded 19" chassis, Al; 19" bracket, plain top cover and base plate (RAL 9006); front handles (RAL 7016) | | | | |
| 2 | 21 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips iitted to bottom front), for vertical board mounting (6 U, 160 mm deep) | | | | |
| 3 | 3 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical mounting of transition module (6 U, 80 mm deep) covered with EMC front panel 6 U/12 HP | | | | |
| 4 | 1 | Backplane VME for 6 U boards, 21 slots, J1/J2 monolithic (part no. 23001-081) | | | | |
| 5 | 1 | Power supply unit, open frame; 744 W (600 W at < 180 V _{AC} ; part no. <u>11098-140</u>) | | | | |
| 6 | 3 | Fan; rear panel, hinged, 5 U, 84 HP; temperature-dependent speed control | | | | |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021) | | | | |
| 8 | 1 | Display module | | | | |
| 9 | 1 | Mains switch | | | | |
| 10 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse | | | | |
| 11 | 1 | Cable harness to connect all system components | | | | |

Order Information

| Height U | Height mm | Depth mm | Number of slots | Part no. |
|----------------|--------------|-------------|-----------------|-----------|
| 8 (1 + 6 + 1) | 354.8 | 355 | 21 | 20836-815 |
| Accessories | | | | |
| Backplanes | Page 10.15 | | | |
| Equipment ca | Page 3.38 | | | |
| Front panels | Page 7.5 | | | |
| Modules to m | Page 8.110 | | | |
| Front panels v | Page 7.18 | | | |
| Fan control m | Page 8.108 | | | |

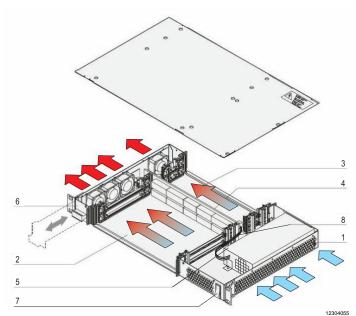
Note

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- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; Backplane konform zu VITA 1.1-1994











1 U, 2 slot, with rear I/O

- System for horizontal board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 2 slot, 6 U, with P0 plug
- ATX PSU, 250 W
- Heat dissipation by pull-out hot-swap fan unit, from right to left
- Fan monitoring and voltage display

Delivery comprises (completely assembled, wired and tested)

| item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, steel plate, black powder-coated (RAL 9005) |
| 2 | 2 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep) |
| 3 | 2 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane VME64x for 6 U boards, 2 slot, with P0 plug, with connector plug for fan unit and ATX PSU |
| 5 | 1 | ATX power supply; 250 W; wide range input 100 240 V _{AC} , output 3.3 V/14 A, 5 V/23 A, 12 V/16 A, -12 V/0.5 A; with IEC connector; mains switch; fan |
| 6 | 1 | Hot-swap fan unit with 4 fans; incl. fan monitoring and voltage display |
| 7 | 1 | DC switch (with LED), switches off only the DC output of the power supply unit, power ON |
| 8 | 1 | Cable harness to connect all system components |

Order Information

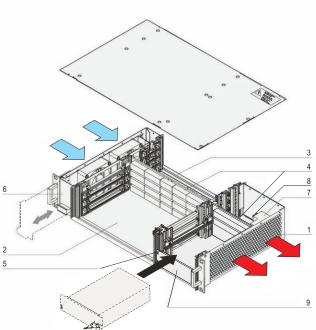
| U | mm | mm | slots | Part no. | | |
|------------------|------------------------------|-------|-------|-----------|--|--|
| 1 | 44.45 | 277.5 | 2 | 20836-145 | | |
| Accessorie | Accessories | | | | | |
| Equipment | Page 3.38 | | | | | |
| Front pane | Page 7.5 | | | | | |
| Modules to | Modules to mount drive units | | | | | |
| Front pane | ls with handl | е | | Page 7.18 | | |

Note

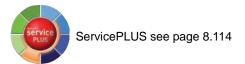
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103;
 IEEE 1101.1, 1101.10/11;
 backplane conforms to VITA 1.1-1997











2 U, 4 slot, with rear I/O

- System for horizontal board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 4 slot, 6 U, with P0 plug
- Power backplane to PICMG 2.11 (P 47), prepared for installation of two 19" compatible PSUs, 250 W (3 U, 8 HP)
- Heat dissipation by pull-out hot-swap fan unit, from left to right
- Fan monitoring and voltage display

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" chassis, steel plate, black powder-coated (RAL 9005) |
| 2 | 4 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep) |
| 3 | 4 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane VME64x for 6 U boards, 4 slots, with P0 plug (part no. <u>23001-534</u>), power backplane, 2 x P47 plug (part no. <u>23098-115</u>) |
| 5 | 1 | Installation space 3 U, 8 HP for two 19" compatible PSUs |
| 6 | 1 | Hot-swap fan unit with 2 fans (12 V _{DC}); incl. fan monitoring and voltage display |
| 7 | 1 | AC mains input module (IEC 320-C14 plug, mains filter, mains switch, mains fuse) |
| 8 | 1 | Cable harness to connect all system components |
| 9 | 1 | 3 U, 8 HP front panel, front mounted |

Order Information

| Height U | Height mm | Depth mm | Number of slots | Part no. |
|--------------------------|--------------|-------------|--------------------|-----------|
| 2 | 88.1 | 277.5 | 4 | 20836-245 |
| Accessorie | es | | | |
| 19" compa Technical d | 13100-141 | | | |
| Equipment | Page 3.38 | | | |
| Front pane | Page 7.5 | | | |
| Modules to | Page 8.110 | | | |
| Front pane | Page 7.18 | | | |

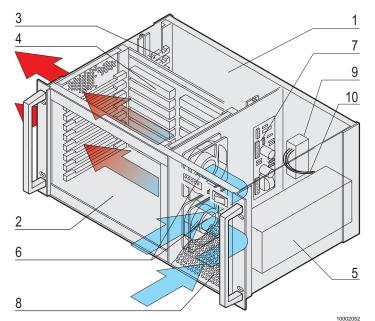
Note

12304057

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103;
 IEEE 1101.1, 1101.10/11;
 backplane conforms to VITA 1.1-1997











4 U, 8 slot, with rear I/O

- System for horizontal board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 8 slot, 6 U, without P0 plug
- \blacksquare PSU, open frame, 560 W (400 W at < 180 V_{AC})
- Heat dissipation by fan, from front to left
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| ltem | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, AI, with perforated side panels and front handles (RAL 7016) |
| 2 | 8 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep) |
| 3 | 8 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane VME64x for 6 U boards, 8 slots, without P0 plug (part no. 23001-508) |
| 5 | 1 | Power supply unit, open frame; 560 W (400 W at < 180 V _{AC} ; part no. <u>11098-212</u>) |
| 6 | 2 | Fan; temperature-dependent speed control |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>) |
| 8 | 1 | Front panel with ventilation openings, 4 U; display module, mains switch |
| 9 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 10 | 1 | Cable harness to connect all system components |

Order Information

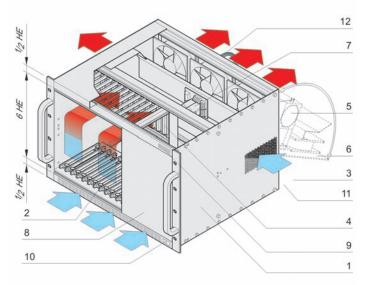
| Height | Height | Depth | Number of | Part no. | | | |
|------------------|--------------|-------|-----------|------------|--|--|--|
| U | mm | mm | slots | | | | |
| 4 | 177 | 277.5 | 8 | 20836-416 | | | |
| Accessorie | Accessories | | | | | | |
| Equipment | Page 3.38 | | | | | | |
| Front panel | Page 7.5 | | | | | | |
| Modules to | Page 8.110 | | | | | | |
| Front panel | Page 7.18 | | | | | | |
| Fan control | l modules (F | CM) | | Page 8.108 | | | |

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997







1 HE = 1 U





7 U, 12 slot, with rear I/O

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear: 6 U, for 3 transition modules
- Backplane VME64x
 - 12 slot, 6 U, without P0 plug
- PSU, open frame, 642 W (600 W at < 180 V_{AC})
- Heat dissipation by fan, from front to rear
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Shielded 19" chassis, Al; with plain top cover and base plate (RAL 9006); front handle (RAL 7016); 19" bracket |
| 2 | 12 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep) |
| 3 | 3 | Rear slot; for transition modules, for vertical board mounting (6 U, 4 HP) |
| 4 | 1 | Backplane VME64x for 6 U boards, 12 slots, without P0 plug (part no. 23001-512) |
| 5 | 1 | Power supply unit, open frame; 642 W (600 W at < 180 V _{AC} ; part no. <u>11098-207</u>) |
| 6 | 3 | Fan; on hinged rear panel; speed control 5 U, 84 HP |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021) |
| 8 | 1 | Front panel 6 U, 36 HP; |
| 9 | 1 | Display module |
| 10 | 1 | Mains switch |
| 11 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 12 | 1 | Front panel at rear with textile EMC gasket, 6 U, 12 HP |
| 13 | 1 | Cable harness to connect all system components |

Order Information

| Height | Height | Depth | Number of | Part no. | | | |
|----------------|-------------|-------|-----------|-----------|--|--|--|
| U | mm | mm | slots | | | | |
| 7 (1/2+6+1/2) | 310.35 | 355 | 12 | 20836-717 | | | |
| Accessories | Accessories | | | | | | |
| Equipment cab | Page 3.38 | | | | | | |
| Front panels | Page 7.5 | | | | | | |
| Modules to mo | Page 8.110 | | | | | | |
| Front panels w | Page 7.18 | | | | | | |
| Fan control mo | Page 8.108 | | | | | | |

Note

10002056

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997





12 3 4 4 4 5 5 2 2 11 10

1 HE = 1 U





8 U, 21 slot, with rear I/O

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 21 slot, 6 U, with P0 plug
- PSU, open frame, 642 W (600 W at < 180 V_{AC})
- Heat dissipation by pull-out fan unit, from bottom to top; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Shielded 19" chassis, AI, with perforated top cover and base plate; front handles (RAL 7016), 19" bracket, front panels (RAL 9006) |
| 2 | 21 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep) |
| 3 | 21 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | Backplane VME64x for 6 U boards, 21 slots, with P0 plug (part no. 23001-551) |
| 5 | 1 | Power supply unit, open frame; 642 W (600 W at< 180 V _{AC} ; part no. <u>11098-207</u>) |
| 6 | 1 | Fan unit with 3 fans, 1.5 U (24 V _{DC} , 250 m³/h each, 148 cfm); temperature-dependent speed control; filter mat |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-028</u>) |
| 8 | 1 | Front panel 0,5 U, 84 HP; |
| 9 | 1 | Display module |
| 10 | 1 | Mains switch |
| 11 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 12 | 1 | Cable harness to connect all system components |

Order Information

| Height U | Height mm | Depth mm | Number of slots | Part no. | | | |
|-------------------------|--------------|-------------|--------------------|------------|--|--|--|
| 8 | 354.8 | 412 | 21 | 20836-820 | | | |
| Accessories | Accessories | | | | | | |
| Equipment cables Page : | | | | | | | |
| Front panels | Page 7.5 | | | | | | |
| Modules to r | Page 8.110 | | | | | | |
| Front panels | Page 7.18 | | | | | | |
| Fan control | modules (F | CM) | | Page 8.108 | | | |

Note

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- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103;
 IEEE 1101.1, 1101.10/11;
 backplane conforms to VITA 1.1-1997

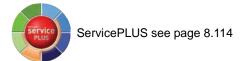




8 13 12 5 3 2 10

1 HE = 1 U





10 U, 21 slot, with rear I/O

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 21 slot, 6+1 U, with P0 plug
- PSU, open frame, 1000 W
- Heat dissipation by 2 pull-out fan units, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

| ltem | Qty | Description | | | |
|------|-----|---|--|--|--|
| 1 | 1 | Shielded 19" chassis, AI, with plain top cover and base plate; front handles (RAL 7016), 19" bracket, front panels (RAL 9006) | | | |
| 2 | 21 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep) | | | |
| 3 | 21 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep) | | | |
| 4 | 1 | VME64x backplane for 6 U boards + 1 U, 21 slots, with P0 connector | | | |
| 5 | 1 | Power supply unit, open frame; 1000 W; wide range input, 100 240 V _{AC} output 3.3 V/60 A, 5 V/120 A, 12 V/17 A, -12 V/17 A; mounted fan | | | |
| 6 | 2 | Fan module with speed-controlled radial fan (500 m³/h = 295 cfm each) for ventilation of boards; mounted behind hinged front panel (2 U) | | | |
| 7 | 1 | Air filter | | | |
| 8 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>) | | | |
| 9 | 1 | Front panel, hinged, 2 U, 84 HP | | | |
| 10 | 1 | Display module; mains switch, DC | | | |
| 11 | 1 | Front panel, hinged, perforated, 2 U, 84 HP | | | |
| 12 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse | | | |
| 13 | 1 | Cable harness to connect all system components | | | |

Order Information

| Height U | Height mm | Depth mm | Number of slots | Part no. |
|---------------------------|-----------------|-------------|--------------------|------------|
| 10 | 443.7 | 456.5 | 21 | 20836-220 |
| Accessori | es | | | |
| Fan modu | le 1 piece | | | 20836-855 |
| Chassis M voltage, ter | 20836-223 | | | |
| Equipmen | Page 3.38 | | | |
| Front pane | Page 7.5 | | | |
| Modules t | Page 8.110 | | | |
| Front pane | els with handle | е | | Page 7.18 |
| Fan contro | ol modules (FC | CM) | | Page 8.108 |

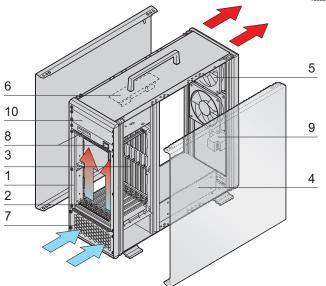
Note

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- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

System - VME64x Tower systems









7 slot, without rear I/O

- Tower system for vertical board mounting with board format - Front: 6 U, 160 mm deep
- Backplane VME64x
 - 7 slot, 6 U, without P0 plug
- PSU, open frame, 560 W (400 W at < 180 V_{AC})
- Heat dissipation by 2 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan alarm
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Tower system based on ratiopacPRO case, shielded, 500 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016 |
| 2 | 7 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep) |
| 3 | 1 | Backplane VME64x for 6 U boards, 7 slots, without P0 plug (part no. 23001-507) |
| 4 | 1 | Power supply unit, open frame; 560 W (400 W at < 180 V _{AC} ; part no. <u>11098-212</u>) |
| 5 | 2 | Fan; speed-controlled; for ventilation of boards |
| 6 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021) |
| 7 | 1 | Front panel, perforated, 4 U |
| 8 | 1 | Display module; mains switch |
| 9 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 10 | 1 | Module to accomodate a 5.25" DVD drive unit |
| 11 | 1 | Cable harness to connect all system components |

Order Information

| Height mm | Width mm | Depth mm | Number of slots | Part no. | | | |
|--------------|-------------|-------------|-----------------|-----------|--|--|--|
| 496.25 | 177.00 | 500 | 7 | 10836-050 | | | |
| Accessorie | Accessories | | | | | | |
| Equipment | Page 3.38 | | | | | | |
| Front pane | Page 7.5 | | | | | | |
| Modules to | Page 8.110 | | | | | | |
| Front pane | Page 7.18 | | | | | | |
| Fan contro | Page 8.108 | | | | | | |

Note

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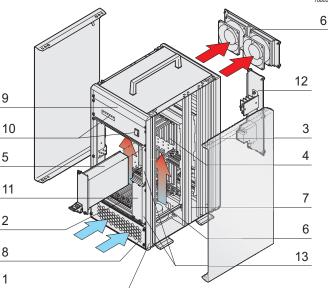
Modified systems available on request

System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997



System - VME64x Tower systems









7 slot, with rear I/O

- Tower system for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 7 slot, 6 U, without P0 plug
- PSU, 19" compatible, 250 W; a second PSU can optionally be fitted
- Heat dissipation by 4 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan and temperature alarm
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Tower system based on ratiopacPRO case, shielded, 300 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016 |
| 2 | 7 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep) |
| 3 | 7 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | VME64x backplane for 6 U boards, 7 slots, without P0 connector |
| 5 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>) |
| 6 | 4 | Fan; speed-controlled; for ventilation of boards |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021) |
| 8 | 1 | Front panel, perforated, 5 U |
| 9 | 1 | Module to accomodate a 5.25" DVD drive unit |
| 10 | 1 | Display module; mains switch |
| 11 | 1 | Front panel 3 U, 8 HP; removable, to allow fitting of a further chassis power supply unit |
| 12 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 13 | 2 | Front panel 3 U, 4 HP; |
| 14 | 1 | Cable harness to connect all system components |

Order Information

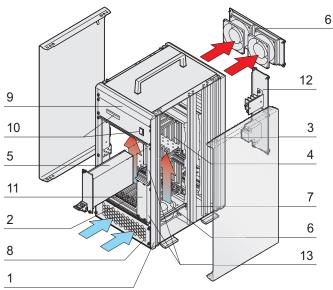
| Height | Width | Depth | Number of | Part no. |
|------------------|----------------|---------------|-----------|-----------|
| mm | mm | mm | slots | |
| 496.25 | 221.45 | 300 | 7 | 10836-045 |
| Accessorie | s | | | |
| 19" compat | ible power s | upply, 250 W, | 3 U, 8 HP | 13100-141 |
| 1 piece, tech | hnical data se | e page 9.22 | | 13100-141 |
| Air filter kit | 20836-235 | | | |
| Equipment | Page 3.38 | | | |
| Front panel | Page 7.5 | | | |
| Modules to | Page 8.110 | | | |
| Front panel | Page 7.18 | | | |
| Fan contro | Page 8.108 | | | |

Note

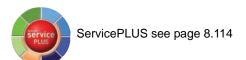
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103;
 IEEE 1101.1, 1101.10/11;
 backplane conforms to VITA 1.1-1997

Systems - VXS (VITA 41) Tower systems









7 slot, with rear I/O

- Tower system for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VXS/VME64x
 - 4 slot VME64x, 6 U, with P0 plug
 - 3 x VXS payload slots connected as ring
- PSU, 19" compatible, 250 W; a second PSU can optionally be fitted
- Heat dissipation by 4 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan and temperature alarm
- Option of fitting a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

| | | , |
|------|-----|--|
| Item | Qty | Description |
| 1 | 1 | Tower system based on ratiopacPRO case, shielded, 300 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016 |
| 2 | 7 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep) |
| 3 | 7 | Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep) |
| 4 | 1 | VXS backplane, 3 slots VME64x, 4 slot; for 6 U boards; with P0 connector; 3 x VXS payload slots, ring connected (part no. 23001-701) |
| 5 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>) |
| 6 | 4 | Fan; speed-controlled; for ventilation of boards |
| 7 | 1 | Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>) |
| 8 | 1 | Front panel, perforated, 5 U |
| 9 | 1 | Module to accomodate a 5.25" DVD drive unit |
| 10 | 1 | Display module; mains switch |
| 11 | 1 | Front panel 3 U, 8 HP; for fitting a further plug-in power supply |
| 12 | 1 | AC mains input (IEC 320-C14 plug), mains filter, mains fuse |
| 13 | 2 | Front panel 3 U, 4 HP; |
| 14 | 1 | Cable harness to connect all system components |

Order Information

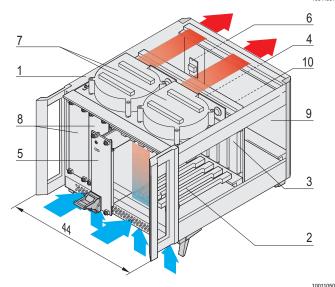
| Height mm | Width mm | Depth mm | Number of slots | Part no. | |
|---|--------------------------|-------------|--------------------|-----------|--|
| 496.25 | 221.45 | 300 | 7 | 10836-060 | |
| Accessories | | | | | |
| 19" compatible power supply, 250 W, 3 U, 8 HP 1 piece, technical data page 9.22 | | | | | |
| Air filter kit 1 | 20836-235 | | | | |
| Equipment c | Page 3.38 | | | | |
| Front panels | Page 7.5 | | | | |
| Modules to n | Page 8.110 | | | | |
| Front panels | Front panels with handle | | | | |

Note

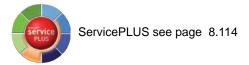
- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
- Backplane, conforms to VITA 41.0, -41.1, -41.10, -41.11

Systems - VPX case systems









4 U, 5 slot

- System for vertical board mounting with board format 3 U, 160 mm deep
- VPX backplane, in accordance with VITA 46, 5 slot, 3 U, 0.8" pitch, full mesh topology
- 19" PSU, 250 W, 3 U, 8 HP (further PSU optional)
- Heat dissipation by 2 radial fans, from front to rear



Delivery comprises (completely assembled, wired and tested)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016 |
| 2 | 5 | Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (3 U, 160 mm deep) |
| 3 | 1 | Backplane for 3 U boards; 5 slot VPX, full mesh topology |
| 4 | 1 | Power backplane, 3 U, 8 HP with 2 x P47 connector |
| 5 | 1 | 19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>) |
| 6 | 1 | AC input module, rear, 3 U, 8 HP |
| | | 110 250 V _{AC} , 50 60 HZ, max. current 10 A; AC line filter, switch, fuse |
| 7 | 2 | Radial fan, 36 m ³ /h each, free blowing |
| 8 | 2 | Front panel, front, 3 U, 8 HP |
| 9 | 1 | Front panel, rear, 3 U, 36 HP |
| 10 | 1 | Cable harness to connect all system components |

Order Information

| Height U | Height mm | Width HP | Depth mm | Number of slots | Part no. | | |
|-------------|----------------------------|-------------|-------------|-----------------|-----------|--|--|
| 4 | 177 | 44 | 275 | 5 | 20836-444 | | |
| Accesso | Accessories | | | | | | |
| Equipme | Equipment cables Page 3.38 | | | | | | |
| Front pa | Page 7.5 | | | | | | |
| Modules | Page 8.110 | | | | | | |
| Front pa | Page 7.18 | | | | | | |
| Fan cont | Page 8.108 | | | | | | |

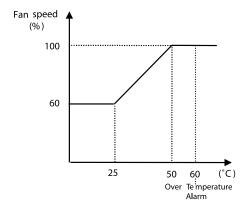
Note

■ Modified systems available on request

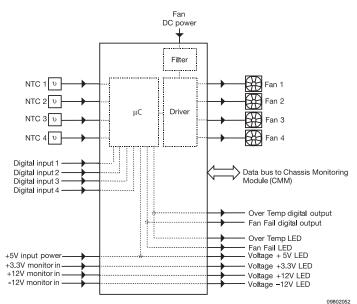


Systems - VPX case systems

FCM with straight connector plug in the left picture caption, with angled connector plug in the left picture caption



Speed characteristics inputs and outputs



Block diagram inputs and outputs

Fan Control Modules (FCM)

- Monitoring and temperature dependent control of fan speed (controlled by µController)
- Up to 4 fans and 4 temperature sensors (NTC) can be connected
- Warning in the case of a malfunction (fan, sensor, µC, over temperature), increase of fan speed to maximum rpm
- Optional display of DC voltages, "Fan Fail" and "Over Temp" via LFD
- Remote monitoring if connected to Schroff chassis monitoring module (CMM)

Delivery comprises

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Fan control module (FCM), |
| | | width 38 mm, depth 160 mm, height 28 mm |
| 2 | 1 | Temperature sensor |
| 3 | 1 | Mating connector kit |

Order Information

| Fan Control Modules (FCM) | Height | Width | Depth | Part no. |
|--|--------|-------|-------|-----------|
| | mm | mm | mm | |
| Connector plug, straight | 28 | 38 | 160 | 23207-021 |
| Connector plug, angled (90°), for mounting on pull-out | 28 | 38 | 160 | 23207-028 |
| Schroff fan unit | | | .00 | 20207 020 |

Note

09802053

 User manual: Please enter part number under www.schroff.biz/oneclick/



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

8.106



Status Monitor Temp. Voltage °C CMM 23 +3,3V FCM 24 °C +5.0VFan Speed +12,0V 61 -12,0V Fan Speed Setting Temperature CMM 25 l°C FCM 50 Fan Speed Temp. Alarm Fan 1 CMM 40 °C Fan 2 FCM 60 Fan 3

Chassis monitoring module (CMM)

- Monitoring of voltages, temperatures and digital inputs
- Communication and remote control via RS 232 or Ethernet interface (10BaseT)
- Inputs and outputs for VME specific and CPCI specific signals, further digital and LED outputs
- Data bus for communication with the Schroff Fan Control Module (FCM)
- Pluggable in 3 U euroboard format

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | Chassis monitoring module (CMM), height 3 U, |
| | | depth 160 mm, width 4 HP, front panel fitted |

Order Information

| Description | Height | Depth | Part no. |
|---------------------------------|--------|-------|-----------|
| | U | mm | |
| Chassis monitoring module (CMM) | 3 | 160 | 23207-022 |

Note

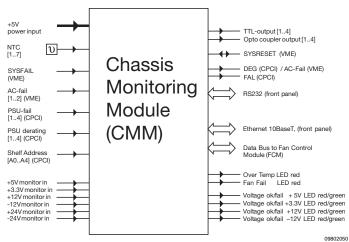
 User manual: Please enter part number under www.schroff.biz/oneclick/



09802051

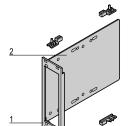
For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

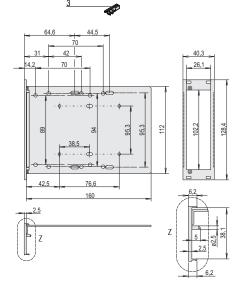
Status display via web browser



Block diagram inputs and outputs

Module to mount drive unit, with front panel, U profile, shielded 1 × 3 1/2", 3 U vertical





Delivery comprises (kit)

| | | • |
|------|-----|---|
| Item | Qty | Description |
| 1 | 1 | U profile front panel with drive unit cut-out, AI, 2.5 mm, front anodised, rear colourless chromated, 2 alignment pins, stainless steel, pressed-in |
| 2 | 1 | Side panel, plug-in version, AI, 1.5 mm, chromated |
| 3 | 4 | Guide rail, PBT UL 94 V-0, red |
| 4 | 1 | Assembly kit |

Order Information

| Front panel dimensions | | Part no. |
|------------------------|-------|-----------|
| Height | Width | |
| U | HP | |
| 3 | 8 | 24579-042 |

Note

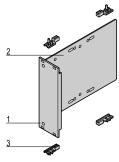
- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110

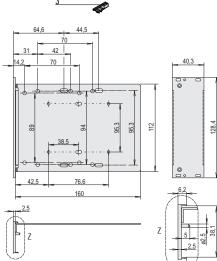


For further information www.schroff.biz/oneclick oneClick search code = Part no.

KAA44883

Module to mount drive unit, with front panel, U profile, shielded HD 1 × 3 1/2", 3 U vertical





Delivery comprises (kit)

| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | U profile front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated; 2 alignment pins, stainless steel, pressed-in |
| 2 | 1 | Side panel, plug-in version, AI, 1.5 mm, chromated |
| 3 | 4 | Guide rail, PBT UL 94 V-0, red |
| 4 | 1 | Assembly kit |

Order Information

| Front panel dimensi | ons | Part no. |
|---------------------|---------|-----------|
| Height H | Width B | |
| U | HP | |
| 3 | 8 | 24579-043 |

Note

- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110

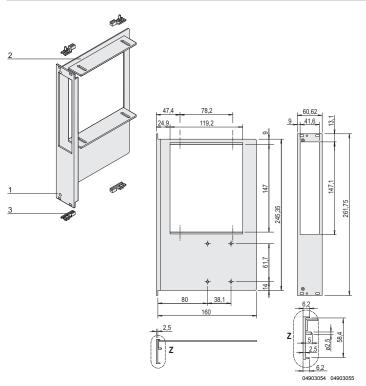


For further information www.schroff.biz/oneclick oneClick search code = Part no.

Main Catalogue

E 10/2012

Module to mount drive unit, with front panel, U profile, shielded, 1 x 5 1/4", HD 1 x 2.5", 6 U vertical



Delivery comprises (kit)

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | U profile front panel with drive unit cut-out, AI, 2.5 mm, front anodised, rear iridescent green chromated |
| 2 | 1 | Side panel, plug-in version, Al, 1.5 mm, passivated |
| 3 | 4 | Guide rail, PBT, UL 94 V-0, red |
| 4 | 1 | Assembly kit |

Order Information

| Front panel dimensions | | Part no. |
|------------------------|-------|-----------|
| Height | Width | |
| U | HP | |
| 6 | 12 | 24579-074 |

Note

- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Module to mount drive unit, with front panel, U profile, shielded, for Slim Line CD/DVD, HD 1 x 2.5", 6 U vertical

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | U profile front panel, 6 U, 4 HP, with drive unit cut-out, Al, 2.5 mm, front anodised, rear iridescent green chromated |
| 2 | 1 | Side panel, plug-in version, AI, 1.5 mm, passivated |
| 3 | 4 | Guide rail, PBT, UL 94 V-0, red |
| 4 | 1 | Assembly kit |

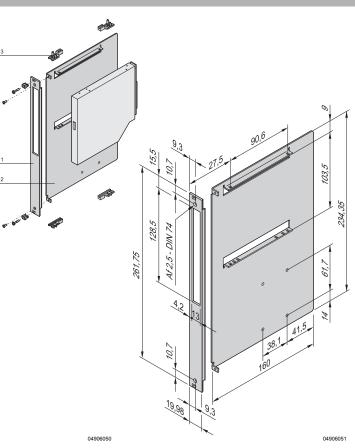
Order Information

| Front panel dimensions | | Part no. |
|------------------------|-------|-----------|
| Height | Width | |
| U | HP | |
| 6 | 4 | 24579-230 |

Note

- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110





Module to mount drive unit HD 1 x 3 1/2", 3 U vertical

Delivery comprises (kit)

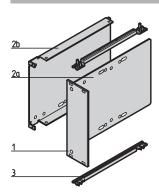
| Item | Qty | Description |
|------|-----|---|
| 1 | 1 | Front panel, Al, 2.5 mm, front anodised, rear irisdescent green chromated |
| 2a | 2 | Side panel, plug-in version, AI, 1.5 mm, passivated |
| 2b | 2 | Side panel, screw-fixed version, AI, 2.0 mm, passivated |
| 3 | 2 | Guide rail, PPE, UL 94 V-0, black; only for plug-in version |
| 4 | 1 | Assembly kit |

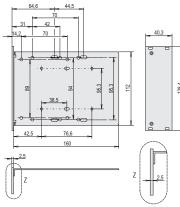
Order Information

KAA44896

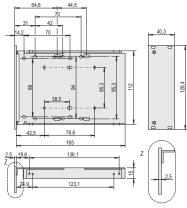
| Front panel di | mensions | Plug-in | Screw-fixed |
|----------------|----------|-----------|-------------|
| Height | Width | version | version |
| U | HP | Part no. | Part no. |
| 3 | 8 | 20810-611 | 20810-605 |

- Please order assembly parts for drive units and guide rails for europacPRO and ratiopacPRO separately, see chapter Subracks europacPRO
- Covers for drive unit cut-outs see page 8.110





Plug-in version



Screw-fixed version

04909050

Covers for drive unit cut-outs

 Front panel is clipped into drive unit cut-out with clamping device

Delivery comprises (assembled)

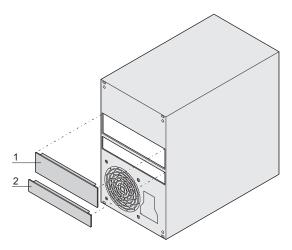
| | • | • • |
|------|-----|---|
| ltem | Qty | Description |
| 1 | 1 | Front panel, Al, 2 mm, anodised |
| 2 | 1 | Clamping device to clip-on, stainless steel |

Order Information

| Item | Description | Part no. |
|------|------------------------------------|-----------|
| 1 | Cover for 5.25" (CD/DVD) | 24496-120 |
| 2 | Cover for Slim Line drive (CD/DVD) | 24496-122 |

Note

■ Covers for 3.5" drive units available on request



Screws for drive units

Order Information

| Description | Qty/PU | Part no. |
|--------------------------------------|--------|-----------|
| Slotted flathead screws, M 3 x 6 | 100 | 21100-711 |
| Pozidrive flathead screws, M 4 x 6 | 100 | 21100-574 |
| Slotted flathead screw, 6-32 UNC x 6 | 100 | 21100-712 |

Cable for drive unit

■ The cable connects commercially available drive units with the power supply

Order Information

| Drive unit cable for 2 x 5 1/4", 2 ring tag Ø M4, length 560 mm, 1 connector AMP/Tyco 1-171822-4 | Item | Description | Qty/PU | Part no. |
|--|------|-------------------------------|--------|-----------|
| | 2 | ring tag Ø M4, length 560 mm, | 1 | 20835-188 |



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

9802054

AC input module with filter

- Front panel (U front panel) for shielding with EMC textile gasket
- Voltage 110 V_{AC} ... 250 V_{AC}, 50 Hz ... 60 Hz
- Max. current 10 A at 40°C

Delivery comprises

| Item | Qty | Description |
|------|-----|--|
| 1 | 1 | U front panel, 2.5 mm, front anodised, rear colourless chromated |

Order Information

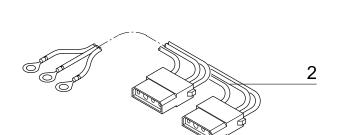
| Height H | Width B | Part no. |
|--------------------------|--------------------|-----------|
| U | HP | |
| 3 | 8 | 24579-058 |
| 6 | 8 | 24579-059 |
| Textile EMC seals | 3 U, PU 10 pieces | 21101-853 |
| Textile EMC seals | 3 U, PU 100 pieces | 21101-854 |
| Textile EMC seals | 6 U, PU 10 pieces | 21101-855 |
| Textile EMC seals | 6 U, PU 100 pieces | 21101-856 |

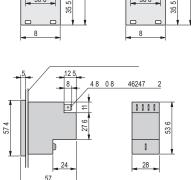
Note

■ EMC profile seals are required to shield the front panels



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.





Systems - ServicePLUS



configuration

Simple. Fast. To the ideal product.

Components can be varied and combined freely

■ Online configuration: <u>www.schroff.co.uk/configuration</u>

■ Our configurators help you select what you need



assembly

Assembled by professionals. Double benefit!

Fitting of all mechanical, electrical and electronic components by our specialists

- From a quantity of 1, completely assembled and tested
- Ready for despatch within 10 working days



modification

Small changes. Large impact.

Custom drillings, cut-outs and special colours for off-the-shelf products

- Mechanical modifications, modifications of backplanes and PSUs, cabling
- Ready for despatch within 15 working days



solution

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- Integration and custom developments
- Air conditioning, complete assembly, function test
- Customised complete solutions



express

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Delivery time to customer's request

- System Express
- Further information: <u>www.schroff.co.uk/express</u>



support

Support. Solution. Availability.

Assistance if required

■ Telephone support



academy

Knowledge. Sharing. Partnerships.

Knowledge transfer and partnership

- Seminars, white papers, CAD drawings, test reports, user reports
- Further information: www.schroff.co.uk/academy



lifecycle

We are with you. For the entire product life.

Flexible support throughout the product lifecycle

■ Exchange service, maintenance, repairs, replacement parts

Systems - ServicePLUS

Application examples



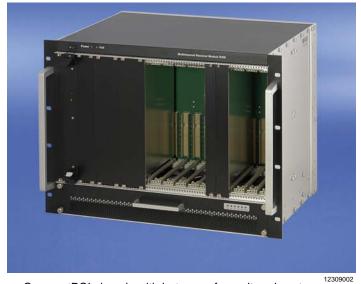
■ Hybrid system, modification of a MicroTCA single-module board cage into a 3 U chassis to DIN EN 60297



MicroTCA system, 1 U for 6 single mid-size AMC modules; power supply, increased air inlet and exhaust area with inwardly curved side panels



■ MicroTCA chassis with hot-swap fan unit and power supply



■ CompactPCI chassis with hot-swap fan unit and custom finishing



■ CompactPCI chassis with 48 V_{DC} power supply



■ 2 slot, 2 U AdvancedTCA chassis with custom colour

