

The Heart of each EMC Test System Flexible • Versatile • Extensible

EMC test systems can vary from simple systems with one or two instruments to complex installations with many measurement instruments connected. In order to enable full automated testing, these devices and measuring instruments, as well as the connections made between amplifiers, power meters, antennas and measurement receivers, should be controlled in an automated manner. Where Radi*M*ation[®] acts as the software centre of the system; the Radi*C*entre[®] systems are the core of the hardware.

Flexible

To cover both single instrument applications as well as small or large EMC test systems the RadiCentre® mainframe is available as a one-slot (CTR1001S), four-slot (CTR1004B) or nine-slot version (CTR1009B). Each slot can be configured at the user's choice with different plug-in cards allowing any combination of functionality.

Extensible

The RadiCentre[®] is expandable with many different plug-in cards.

 $Radi \textit{S} ense^{\circledR}$ the range of LASER powered E-Field Sensors up to 18 GHz

 $RadiLink^{\mathbb{R}}$ the analogue fibre optic link till 3 GHz

Radi*M*ate[®] the four channel AD/DA converter for EUT monitoring

RadiPower® the range of RF power meters for EMC applications up to 18 GHz

Radi Gen® the RF signal generator for EMC applications up to 6 GHz

 $RadiSwitch^{\circledR}$ to switch one, two, four or six RF signals up to 40 GHz

RadiControl® Antenna Tower/Positioner and Turntable controller



Space effective

Where in general controllers, probes, switches and other equipment take one or more units in a 19-inch cabinet, the RadiCentre® systems allow for combining up to seven devices in just three units height (3U). The RadiCentre® is available as a desktop and 19-inch rack mountable unit. This has either two- or seven free plug-in card slots as two of the slots are reserved for a power supply and PC interface plug-in card.

Easy to use

The system is "Plug and Play", which means that every plug-in card is automatically recognized, initialized and ready for use. The user can configure and control the card by means of a TFT touch screen (CTR1009B/CTR1004B).

Software support

The RadiCentre® is software controllable with RS-232 or USB. The CTR1009B and CTR1004B can be optionally controlled by IEEE-488. Beside our RadiMation® integral EMC measurement software, the system can be controlled by all EMC measurement packages, as all software codes to control the unit are available.

Linux Based & Software upgrades

The system is Linux based thus offering great stability and fast start-up times. As all embedded software is stored in flash, it is very easy to upgrade the system with new versions, thus protecting the initial investment.

Technical Specifications

RadiCentre® Modular EMC Test Systems

Performance	CTR1001S	CTR1004B CTR1009B		CTR1001S CTR1004B	
Number of slots for Plug-in Cards	1	2	7		
Display (TFT touch screen)		7" TFT/WVGA (800x480) Intelligent versatile backplane			
Backplane					
Processor	NA	800 MHz Vortex 86DX CPU 256MB DDR2 RAM, 256 MB Flash			
Memory					
Operating System		Linux			
Model	Desktop	Desktop or 19" rack mountable			

Dimensions		
Height	50 mm	132 mm (3U)
Depth	254 mm	312 mm excluding projections
Width	180 mm	19" (rack mountable)
Weight	1,4 kg	Approx. 7 kg (empty)

Environmental conditions	
Temperature range	$10^{0} \mathrm{C} - 40^{0} \mathrm{C}$
Relative humidity	10% – 90% (non-condensing)

Power consumption			
Supply voltage	12 VDC	115 VAC / 230 VAC	
Power consumption, standby	NA	< 0,5 W	
Power consumption, empty	NA	33 W	
Power consumption, maximum load	24 W	180 W	

Interfaces & cables		
Interface	RS-232 & USB	RS-232, USB and LAN. IEEE-488 optional
Connectors	DC-Power, Sub D-9, USB-B 1.1	IEC Inlet, 2x USB-A 2.0, USB-B 1.1, LAN, Sub D-9, IEEE-488 (optional) and Interlock
Cables	RS-232 cable, AC/DC Adapter	RS-232 cable, IEC power cord

Safety	
Interlock	External Interlock & Interlocked LASER outputs

Warranty	
Warranty	3 years (misuse excluded)

Plug-in cards	
Radi <i>S</i> ense [®]	the LASER powered range of EM Field Sensors (4, 6 and 18 GHz)
Radi <i>L</i> ink [®]	the analogue optic fibre link to 3 GHz
RadiMate [®]	the four channel AD/DA monitor for EUT monitoring applications
Radi <i>P</i> ower®	the range of power meters up to 18 GHz for EMC applications
Radi Gen®	the range of RF signal generators up to 6 GHz for EMC applications
RadiSwitch®	to switch one, two, four or six RF signals up to 40 GHz
RadiControl®	Antenna Tower and Turntable controller

More information

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