



30 014 060 - 3

Input module FTS14EM

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location:
-20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

**valid for devices from production week
11/21** (see bottom side of housing)

Input module for the Eltako RS485 bus, 10 control inputs for universal control voltage. Only 0.1 watt standby loss.

Modular device for DIN-EN 60715 TH35
railmounting. 2 modules = 36 mm wide,
58 mm deep.

**Connection to the Eltako-RS485 bus. Bus
cross wiring and power supply with jumper.
Operation in conjunction with FTS14KS or
FAM14.**

A 12V DC voltage is supplied from a switching
power supply unit FSNT14-12V/12W which
has a width of only 1 module.

10 control inputs +E1 to +E10/-E electrically
isolated from the supply voltage. Control
voltage: 8..230V UC.

The control inputs can be either activated
for pushbuttons (delivery state), window-
door contacts or motion detectors.

From the production week 21/19 the signals
of the control inputs can be inverted.

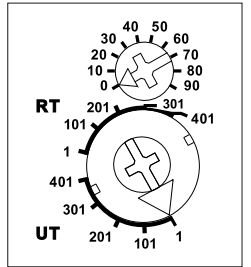
Control inputs for pushbuttons:
telegrams of pushbuttons will be generated
(e.g. 0x70). Each FTS14EM can be set to UT
(= universal pushbutton) or RT (= direction
pushbutton) on the lower rotary switch.

Control inputs for window-door contacts:
telegrams of the window-door contact FTK
are generated (EEP D5-00-01). If the input is
driven by the contact with the control voltage

to be applied externally, the telegram 'window
open' is generated. If the windows-door
contact is opened, the telegram 'window
open' is generated. As with the wireless
sensor FTK, the status telegram is repeated
every 15 minutes.

Control inputs for motion detectors:
telegrams of the wireless motion/brightness
sensor FBH are generated (EEP A5-08-01),
wherein the brightness value is always 0. If
the input is driven by the motion-detectors-
contact with the control voltage to be
applied externally, the telegram 'motion' is
generated. If the contact is opened, the
telegra 'no motion' will be generated. As
with the wireless sensors FBH, the status
telegram is repeated every 15 minutes.
Each telegram of a contact input has to be
taught-in with an identification number (ID)
into one or more actuators according to the
operating instructions.

Function rotary switches



The lower rotary switch defines the group
to which an FTS14EM belongs. A total of 5
groups are available (1, 101, 201, 301 and 401)
each with 100 IDs. The upper rotary switch
(0 to 90) sets the ID within a group. The ID
range within a group results from the com-
bination of upper and lower rotary switches
and must be set differently on each FTS14EM.
Maximum ten FTS14EMs form a group. There-
fore, a total of 50 FTS14EMs comprising 500
pushbuttons or contacts are possible in one
RS485 bus.

To generate the necessary **teach-in telegrams**
for teaching-in into the actuators, the re-
quested group has to be selected on the
upper and lower rotary switch. For push-
buttons in the range UT or RT or for window-
door contacts and motion sensors in the
range RT. Then confirm the required control
input.

In operation, the same group must be selected
in the range UT or RT for pushbuttons or UT
for window/door contacts and motion sensors.
The LED below the upper rotary switch flashes
briefly, when a connected contact is closed.

Optional: An FAM14 wireless antenna module
(from Wireless Building System) which is only
two modules wide can also be installed.
Actuators can then be activated via the
FTS14EM by wireless pushbuttons and
contacts, hand-held transmitters and wireless
sensors in addition to conventional buttons.
As the FAM14 has an integrated switch mode
power supply unit, the FTS14KS is no longer
required for power supply in this configuration.
The bidirectional FAM14 also permits a
Smart Home central unit SafeIV to evaluate
feedback messages from the actuators
transferred by wireless. Each actuator status
is then displayed and can also be changed.
Connecting the HOLD terminals of all devices
regulates bus access and prevents collisions.
The telegrams of the FTS14EM and FTS14KEM
can also be sent to the Eltako Wireless Building
with the optional **wireless output module
FTS14FA.**

**All hold terminals of the FTS14EM must be
connected to the hold terminal of the
FTS14KS or FAM14.**

**When 1 to 10 FTS14EMs are used, the HOLD
terminal on one FTS14EM must be connected
to the Enable terminal.**

**When 11 to 20 FTS14EMs are used, the
HOLD terminal on two FTS14EMs must be
connected to the Enable terminal.**

**When 21 to 30 FTS14EMs are used, the
HOLD terminal on three FTS14EMs must be
connected to the Enable terminal.**

**When 31 to 40 FTS14EMs are used, the
HOLD terminal on four FTS14EMs must be
connected to the Enable terminal.**

**When 41 to 50 FTS14EMs are used, the
HOLD terminal on five FTS14EMs must be
connected to the Enable terminal.**

**Activate the inputs for pushbuttons (factory
setting):**

turn the lower rotary switch within 3 seconds
5 times to the left stop, the LED goes on during
2 seconds.

**Activate the inputs for window/door con-
tacts:** turn the upper rotary switch within
3 seconds 5 times to the left stop, the LED

goes on during 4 seconds.
Activate the inputs for motion sensors:
turn the upper rotary switch within 3 seconds
5 times to the right stop, the LED goes on
during 6 seconds.

Invert the signals of the control inputs:
Turn the bottom rotary switch within 3 seconds
5 times to the right, the LED lights up for
2 seconds.

By activating the control inputs for buttons,
window-door contacts or motion detector
the inversion is cancelled.

- 10 control inputs = 10 universal push-
buttons UT:**
- E1 = 0x70 (FT4- top right)
 - E2 = 0x50 (FT4- bottom right)
 - E3 = 0x30 (FT4- top left)
 - E4 = 0x10 (FT4- bottom left)
 - E5 = 0x70
 - E6 = 0x50
 - E7 = 0x30
 - E8 = 0x10
 - E9 = 0x70
 - E10 = 0x50

If the control input E10 is controlled with a
switch, a wireless pushbutton telegram is
generated cyclically every 5 minutes.

- 10 control inputs = 5 direction push-
buttons RT:**
- E1/E2 send 70/50 (= pushbutton right side
top/bottom)
 - E3/E4 send 30/10 (= pushbutton left side
top/bottom)
 - E5/E6 send 70/50
 - E7/E8 send 30/10
 - E9/E10 send 70/50

IDs are generated in 'quasi-decimal' num-
bering in order to make it easier to convert
terminal numbering to the button IDs to be
entered in PCT14.

The ID numbers are therefore identical to
the input numbers. You only need to add
1000.

- Lower rotary switch on UT:**
Each input has a separate ID.
IDs of first group:
- 0x1001..0x1010 (pushbutton 1..10)
 - 0x1011..0x1020
 - 0x1021..0x1030
 - 0x1031..0x1040

0x1041..0x1050 (pushbutton 41..50)
 0x1051..0x1060
 0x1061..0x1070
 0x1071..0x1080
 0x1081..0x1090
 0x1091..0x1100 (pushbutton 91..100)
 IDs of second group:
 0x1101..0x1110 (pushbutton 101..110)
 0x1111..0x1120
 0x1121..0x1130
 0x1131..0x1140
 0x1141..0x1150 (pushbutton 141..150)
 0x1151..0x1160
 0x1161..0x1170
 0x1171..0x1180
 0x1181..0x1190
 0x1191..0x1200 (pushbutton 191..200)
 ..etc.. until group 5

Lower rotary switch on RT:

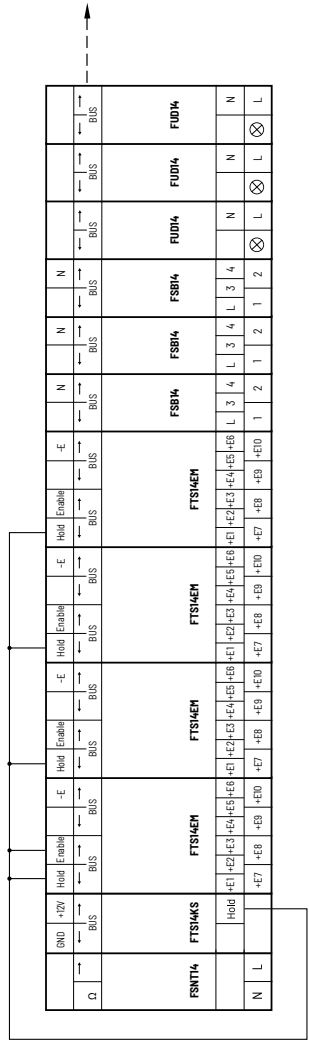
IDs are combined in pairs. There are no odd numbers. Numbering (in steps of 2) is simpler with even numbers than with odd numbers.
 Pushbutton 1..10
 E1 und E2 = 0x1002
 E3 und E4 = 0x1004
 E5 und E6 = 0x1006
 E7 und E8 = 0x1008
 E9 und E10 = 0x1010
 Pushbutton 11..20
 E1 und E2 = 0x1012
 E3 und E4 = 0x1014
 E5 und E6 = 0x1016
 E7 und E8 = 0x1018
 E9 und E10 = 0x1020
 ..etc.



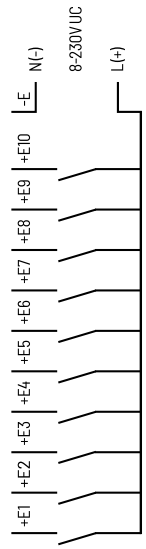
Attention: if several inputs for switches, window/door contacts or motion sensors are used, the control voltage must be ≥ 24 V.

Technical data	
Control voltage: 8 V AC/DC 12 V AC/DC 24 V AC/DC 230 V AC/DC (<5s)	Control current: 1.4 mA/2.5 mA 2.3 mA/4.0 mA 5.0 mA/9.0 mA 5(100) mA/5(100) mA
Parallel capacitance (approx. length) control lead at 230 V	0.9 μ F (3000 m)
Standby loss	0.1 W

Typical connection



The second terminator which is included in the FST14KS has to be plugged to the last actuator.

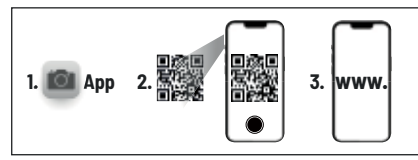


Control inputs FTS14EM

Manuals and documents in further languages:



<http://eltako.com/redirect/FTS14EM>



Must be kept for later use!
 We recommend the housing for operating instructions GBA14.

Eltako GmbH
 D-70736 Fellbach
Technical Support English:
 ☎ +49 711 94350025
 ✉ technical-support@eltako.de
eltako.com