



30 014 000 - 3

Wireless antenna module FAM14

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
40/18** (see bottom side of housing)

**Wireless antenna module for the Eltako
RS485 bus with exchangeable antenna.
With integrated power supply unit 12V DC/8W.
Bidirectional. Encrypted wireless.
Only 1 watt standby loss. If required, a wire-
less antenna FA250 or FA200 can be con-
nected.**

Modular device for DIN-EN 60715 TH35 rail
mounting. 2 module = 36 mm wide, 58 mm
deep.

Supply voltage 230 V.

The delivery includes 1 Spacer DS14, 2 termi-
nators with printing 0, 1/2 module, 3 jumpers
1 module (including 1 spare), 1 jumper 1,5 TE,
2 jumpers 1/2 module (including 1 spare) and
1 jumper installation tool SMW14.

At a load of more than 50% of the rated
capacity a ventilation clearance of 1/2 module
must be maintained with the spacer DS14.
Therefore, this and a long jumper are included.

**The wireless antenna module FAM14
receives and tests all signals from wire-
less transmitters and repeaters within its
receiving range. These are transmitted
via an RS485 interface to RS485 bus
switching actuators connected in series:
Up to 126 channels can be connected to
the Eltako RS485 bus. Bus cross wiring
and power supply with jumper.**

The attached second terminator should be

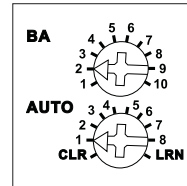
plugged to **the last actuator.**

**You can teach in up to 128 encrypted sensors.
Mini USB to connect to a PC, to create an
equipment list, to configurate the actuators
using the PC tool PCT14 and for data backup.**
A legalization code to download the PCT14
from the Eltako homepage www.eltako.com
is included in the FAM14.

Gateways FGW14 and FGW14-USB will be
connected to the terminal HOLD when they
connect a PC with a RS232 bus and/or up to
3 wireless receiver modules FEM with a sub-
bus RS485.

FTS14EM, FTS14KEM, FTS14KS and FTS14TG
will be also connected to terminal Hold.

Function rotary switches



The lower rotary switch is required to
teach in encrypted sensors and can be
turned to AUTO 1 in operation.

Unencrypted sensors need not be taught-in
in the FAM14.

When **the top rotary switch** is set to **position 1**,
a bus scan can be performed. Then addresses
(1..126) for new actuators will be assigned
which were successively set to LRN.
The bottom LED flashes red, when an address
was assigned the LED flashes green for
5 seconds.

When **the top rotary switch** is set to **position 2**
or after switching on the supply voltage, a bus
scan is performed and a scan list is created.
Then incoming wireless messages are
delivered to the bus, confirmation telegrams
of actuators are cyclically requested for
scan lists and sent into the Eltako wireless
network.

The bottom LED flashes red and lights up green
for a short period if a telegram was sent.

Pos. 3: like position 2, but without sending
into the Eltako wireless network.

Pos. 4: like position 3 but also status tele-
grams of the actuators are requested.

Pos. 5: incoming wireless telegrams are
delivered to the bus, confirmation tele-
grams from the actuators for the device list,

which were created in the PC tool PCT14, are
cyclically requested and sent to the Eltako
wireless network. The bottom LED lights up
green for a short period if a telegram was sent.

Pos. 6: like position 5, but without sending
into the Eltako wireless network.

Pos. 7: like position 6 but also status telegrams
of the actuators are requested.

Pos. 8: unidirectional operation, only in-
coming wireless telegrams are delivered to
the bus.

Pos. 9: teaching-in wireless timer FSU14 in
wireless actuators or sending telegrams into
the bus and Eltako wireless network with PC
software WinEtel.

Pos. 10: teaching-in of the wireless timer
FSU14 into bus actuators or operating with
PC tool PCT14. The lower LED flashes green
and flickers during bus operation.

The upper LED displays all perceived wire-
less commands in the reception area by
short flickering.

The bottom LED lights up green if a connection
from the PC tool PCT14 to the FAM14 was
created. When reading or writing date the
LED flashes green.

The green LED goes out if the connection
from the PC tool PCT14 to the FAM14 was
terminated.

Assign device address for actuators:

The rotary switch on the FAM14 is set to
position 1, its lower LED flashes red. The
rotary switch of the first actuator is set to
LRN, the LED on the actuator flashes smoothly.
After the address of the FAM14 was assigned,
its lower LED flashes green for 5 seconds
and the LED of the actuator goes out. Then
set the second actuator to LRN etc. Caution!
The bottom rotary switch of the FSR14 has
to be on one channel.

Teach in encrypted sensors:

1. Turn the lower rotary switch to LRN.
The upper LED flashes very rapidly.
2. Enable sensor encryption. The upper
LED goes out.
3. Teach in the function of the encrypted
sensor in the actuators.

To teach in other encrypted sensors, turn
the lower rotary switch briefly away from
position LRN and then turn it to 1.

With non-encrypted sensors which are
already taught-in in actuators, you need
not repeat the teach-in function in
actuators after encryption is enabled or
after teach-in in the FAM14.

If the encryption function in a sensor is
disabled, it must be cleared in the FAM14
so that the actuators can continue to be
activated.

With encrypted sensors, use the 'rolling
code', i.e. the code changes in each tele-
gram, both in the transmitter and in the
receiver.

If a sensor sends more than 128 telegrams
when the FAM14 is not enabled, the sensor
is no longer recognised by the enabled
FAM14 and you must repeat the teach-in
function as 'encrypted sensor'.

It is not necessary to repeat the teach-in
function in the actuators.

Clear single taught-in encrypted sensors:

Turn the lower rotary switch to CLR. The
upper LED flashes very rapidly. Enable
sensor encryption. The upper LED goes out.

Clear all taught-in pushbuttons:

Within 10 seconds, turn the lower rotary
switch three times to left stop CLR (turn
anticlockwise) and back again.

The upper LED lights up and goes out
after 2 seconds. All encrypted sensors
are cleared.

Configure FAM14:

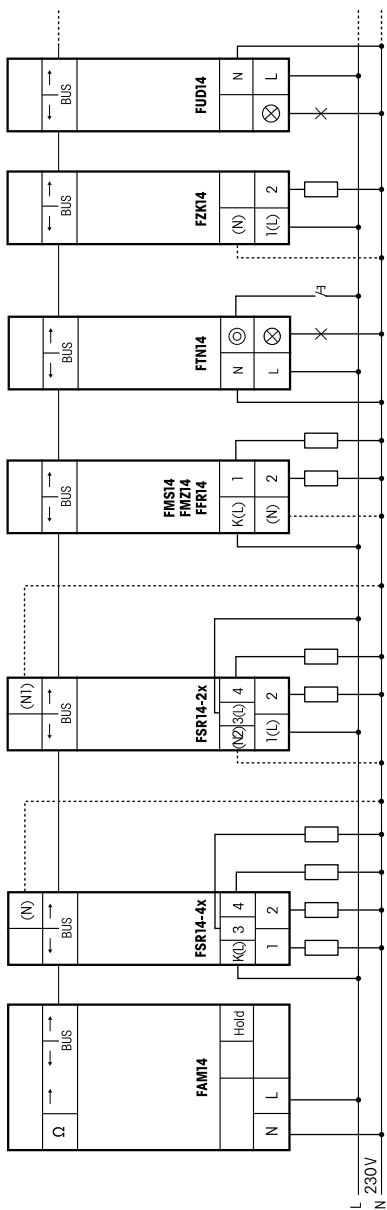
The following points can be configured with the PC tool PCT14:

- create device list
- read out base ID

CAUTION! Don't forget 'disconnect FAM' in the PC tool. While the connection from the PC tool to the FAM14 exists, no wireless commands are executed.

Typical connection

Wireless antenna module with wireless switching actuators connected in series

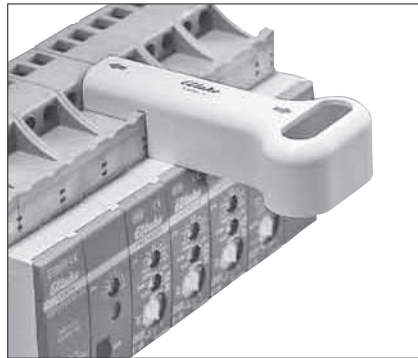


The attached second terminator should be plugged to the last actuator. or a terminating resistor has to be clamped to the terminals RSB/RSA of the last energy meter (120 Ω, not included).



Attention! Follow exactly this installation procedure:

1. Place all devices on the DIN rail.
2. Fasten the devices right and left with end clamps for DIN rail.
3. Connect all cables and wires.
4. Insert the jumpers, to do that, place the jumper into the tool SMW14 and connect it on the devices.



For connecting or removing the jumpers, only use the jumper installation tool SMW14 and move vertically to the DIN rail.



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THE UNIQUE WIRELESS PROFESSIONAL SMART HOME STANDARD

Frequency	868.3 MHz
Transmit power	max. 10 mW

Hereby, Eltako GmbH declares that the radio equipment type FAM14 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: eltako.com

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

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