

## S\_FAM14 – Wireless Antenna Modul – Modular Extendable Receiver

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### Description:

The wireless antenna module S\_FAM14 receives and checks all signals of the transmitter modules and repeaters within its receiving range. Those are transmitted via the RS485 interface to the RS485 bus actuators (S\_FSR14-2x) being connected in series. Up to 126 channels can be connected via the bus (the RS485 bus actuator S\_FSR14-2x has 2 channels). Up to 118 transmitter IDs (Schlegel transmitter) can be taught in for each channel. The wireless transmission is provided via the European harmonised frequency of 868.3 MHz. The system is particularly suitable for a flexible building or industrial automation as the expenditure in assembly and installation for a new installation, subsequent installation or reconstruction is being reduced.

The receiver responds when receiving switching commands from binary wireless sensors and switches of different manufacturers whose sensors are based on EnOcean PTM and STM modules.

For the assignment of a switching command from a transmitter to a switching output a one-time teach in of the transmitter is necessary; the filing of the fixed transmitter address is provided in the individual RS485 bus actuator in a power failure safe manner. A mixed operation of transmitters based on PTM or STM is possible.

One transmitter can be taught in to several channels (1 transmitter to n-outputs; 1:n). Several transmitters can be assigned to one output (n-transmitter to 1 output; n:1). Furthermore, one transmitter can have different functions (maintained, momentary) on two different RS485 bus actuators at the same time.

The RS485 bus actuator S\_FSR14-2x offers two potential free NO contacts for the switching outputs.

**The S\_FAM14 is just a receiver with intergrated switching power supply. The RS485 bus actuators (S\_FSR14-2x) are not scope of the delivery.**

S\_FAM14



### Technical Data S\_FAM14:

Power supply voltage:	230V AC 50HZ
Operating voltage:	12V DC 1A (integrated switching power supply)
Number of channels (relay outputs):	max. 128
Protocol:	EnOcean 868,3 MHz
Mounting:	mounting rail DIN-EN 60715 TH35
Dimensions:	36mm width, 58mm depth
Degree of protection housing/connections:	IP50/IP 20
Ambient temperature mounting position:	-20°C...+50°C
Storage temperature:	-25°C up to +70°C.
Relative humidity:	annual mean value <75%.

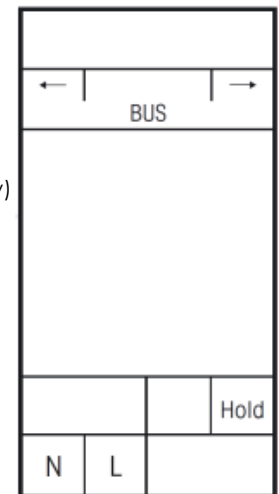
### Accessories:

- Wireless antenna (scope of delivery)
- S\_FSR14-2x for expanding the number of channels (not scope of delivery)
- 3x plug-in jumpers to connect new actuators to the RS485 bus/connecting with S\_FAM14.
- 2x termination resistors for RS485 bus (scope of delivery)
- 1x jumper mounting tool (scope of delivery)
- 1x horizontal pitch (placeholder element, scope of delivery)
- RF magnetic antenna incl. 2.5m connecting cable with SMA connector (type S\_758-910, not scope of delivery)

### Notes as to the Range:

The ranges depend among others on the place of mounting (mounting height and position) and the building structure. The used materials and wall thickness have influence on the quality of the wireless transmission. Thus it is recommended to carry through a test as to the wireless transmission prior to the installation.

- Subject to alterations -



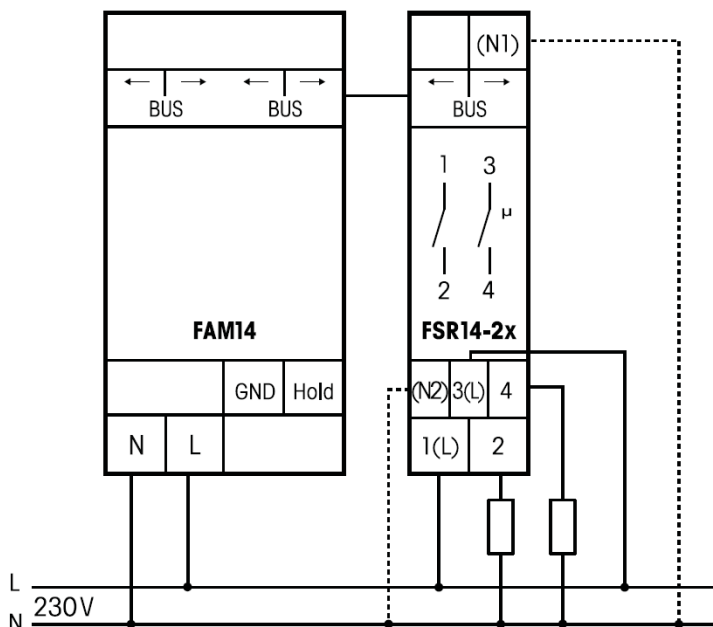
## Typical Maximum Ranges:

1. Visual contact: 30 m in corridors, up to 100 m in halls
2. Plasterboards/wood: 30 m through a max. of 5 walls
3. Brick walls/aerated concrete: 20 m through a max. of 3 walls
4. Reinforced concrete walls/ceilings: 10 m through max. 1 ceiling
5. Supply units and lift shafts to be considered as isolation

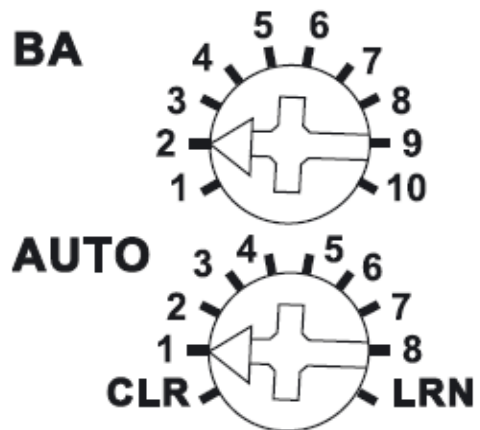
## Mounting and Operation Manual:

- ⚠ The units may only be installed by skilled electricians, otherwise there is the risk of fire or electric shock!
- ⚠ The switch status remains in case the power supply fails. In case of recurrent power supply it is switched off as defined.
- ⚠ **The second attached terminating resistor has to be latched to the last RS485 bus actuator.**
- ⚠ In case of a higher load of more than 50% of the rated load of 12 W a half horizontal pitch ventilation distance on the left side provided by the spacer S\_DS14 is necessary.
- ⚠ When the selector switch „BA“ has been turned to pos. 1 a bus scan is performed. Then the addresses (1..126) are assigned for the new actuators which one after the other have been put to LRN. The bottom LED flashes red. If an address has been assigned the LED lights up in green for 5 seconds.
- ⚠ Upon assignment of the addresses please ensure that the selector of the S\_FAM14 is turned to the neutral position (selector „BA“ on pos. 2 and selector „AUTO“ on pos. 1, as per the illustration hereafter).
- ⚠ All transmitters have to be taught in to the RS485 bus actuators and their channels, so that they can operate as per their commands.

Wiring example



Selector S\_FAM14  
(neutral position)



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