

Wireless Powerline tunnel gateway

FPLT14

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%.

Wireless powerline tunnel gateway.

Mono and bidirectional. Only 0.4 watt standby loss.

Modular device for DIN-EN 60715 TH35 rail mounting.

2 modules = 36mm wide, 58mm deep.

Supply voltage 230V.

Connection to the Eltako-RS485 bus. Bus cross wiring and power supply with jumper.

This gateway transmits RS485 bus telegrams over powerline with large distance over the electrical net. Minimum 2 pcs FPLT14 are required.

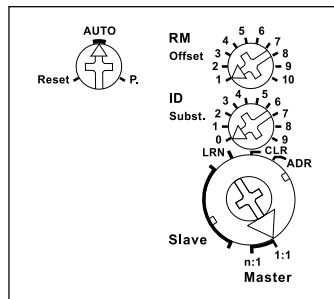
For operation to happen, a device address has to be assigned for the FPLT14 from the FAM14 or FTS14KS.

The HOLD terminal is to be connected to the FAM14 or FTS14KS.

If the FPLT14 is to be operated only with the FSNT14 and the FTS14EM, the HOLD terminal has to be connected to the ENABLE terminal.

The telegram duplicator FTD14 can also send telegrams over the Wireless Building System after the IDs are taught in the FTD14 or entered using PCT14.

Function rotary switches



Bidirectional 1:1 connection:

Bidirectional wireless and bus telegrams can be transmitted from a BR14 bus via Powerline. They are then output 1:1 (incl. ID) on the other BR14 bus in each case.

All RPS, 1BS and 4BS telegrams are possible. Only the ID of the sent telegram needs to be taught into the FPLT14 or entered using PCT14.

Set the **Master 1:1** mode on the **lower rotary switch** on one FPLT14 and **Slave** mode on the **lower rotary switch**.

The operating mode allocation has no impact on operation. Taught-in telegrams are transferred to the other BR14 bus in each case.

Because of the communication delay are short clic signals for FUD and FSB not safe transmitted.

With pushbuttons therefore, it is preferable to use ZE/ZA commands. There are no restrictions with all other sensor or activation telegrams.

Unidirectional n:1 connection:

Up to 10 different BR14 bus systems can be transmitted by one FPLT14 acting as transmitter to send telegrams to a BR14 bus, with one FPLT14 acting as receiver. This application permits the transmission of meter and sensor data in one direction to a central location. Also in this case, telegrams are forwarded 1:1 together with their ID. Only the ID of the sent telegram needs to be taught into each FPLT14 or entered using PCT14.

Set **Master n:1** mode on the receiving FPLT14 on the **lower rotary switch**. Set **Slave** mode on all transmitting FPLT14 devices on the **lower rotary switch**. When bus feedbacks are sent, make sure that the right upper rotary switches

are set to different settings on all Slave FPLT14 devices.

The left rotary switch is set to AUTO during operation.

Use the right upper rotary switch RM to add an offset to the ID (= device address on the bus) for bus feedbacks depending on the rotary switch position 1 to 10. 1 = +0x100, 2 = +0x200 etc., so that a distinction can be made from device-specific feedbacks on the bus.

Use the middle rotary switch ID in positions 1 to 9 to replace the original ID by a substitution (fixed ID + memory location) to transfer received wireless telegrams.

Pos. 0: ID = original

Pos. 1: ID = 0x61yy (yy = memory location number of taught-in ID)

Pos. 2: ID = 0x62yy

...

Pos. 9: ID = 0x69yy

This function is effective in both operating modes and can be useful for the simultaneous reception of wireless telegrams on the FAM14 and over Powerline to prevent double telegrams.

Assigning a domain (home address):

The FPLT14 is unconfigured in as-delivered state.

All coupled FPLT14 must have a common domain (dwelling address).

It must be different from other Powerline actuators and FPGL14 devices on the network!

1. Switch on the fuse for all FPLT14 and FAM14 devices.

The red LED below the left function rotary switch of all unconfigured FPLT14 flickers.

2. Set **operating mode** (Master 1:1, Master n:1 or Slave) on all FPLT14 devices on the **lower rotary switch**.

3. On one FPLT14 turn the left rotary switch 5 times to Reset (left stop) and then back to AUTO. The domain (dwelling address) is generated and taken over by all other FPLT14 devices. While this occurs, the operating mode setting is also taken over. A later change to the operating mode rotary switch has no effect any more.

The red LED below the left function rotary switch of all configured FPLT14 is off.

Reset FPLT14 to as-delivered state:

The left rotary switch is set to reset for 5 seconds. The red LED below the left rotary switch first goes on, and then begins to flash. The domain (home address) has been deleted and the as-delivered state restored.

Send node ID:

The left rotary switch is briefly set to P., and the Powerline node ID is sent.

The red LED below the right upper function rotary switch accompanies the teach-in process and indicates control commands in operation by flashing briefly.

The green LED below the lower function rotary switch flashes briefly when a confirmation telegram is sent.

Assign device address for FPLT14:

Set the rotary switch on the FAM14 to position 1, its lower LED flashes red. Set the lower rotary switch of the FPLT14 to ADR. The red LED flashes at a low rate. Once the address has been assigned by the FAM14, its lower LED flashes green for 5 seconds and the LED of the FPLT14 goes out.

Delete device configuration:

Set the lower rotary switch to CLR. The red LED flashes nervously. Now turn the upper rotary switch within 10 seconds 5 times to the leftmost stop (anticlockwise) and turn it back again. The LED stops flashing and goes out after 5 seconds. The factory settings are restored.

Clear device configuration and device address:

Set the lower rotary switch to CLR. The red LED flashes nervously. Within the next 10 seconds, turn the upper rotary switch eight times to left stop (turn anticlockwise) and away again. The LED stops flashing and goes out after 5 seconds. The factory settings are restored and the device address is cleared.

Teaching in sensors into the FPLT14:

1. Turn the lower rotary switch to LRN; the red LED flickers at a slow rate.
2. Quickly confirm the pushbutton to be taught-in by pressing it 2 times in a row ('double-click'). The LED goes out.

To teach-in further sensors, turn the lower rotary switch briefly away from position LRN. Continue the procedure from pos 1.

After teaching-in, set the lower rotary switches back to the operating mode.

Clear all taught-in sensors:

Set the lower rotary switch to CLR. The red LED flashes at a high rate. Within the next 10 seconds, turn the upper rotary switch five times to the right stop (turn clockwise) and then turn back away from the stop. The LED stops flashing and goes out after 2 seconds. All taught-in sensors are cleared.

Clear individual taught-in sensors in the same way as in the teach-in procedure, except that you set the lower rotary switch to CLR and operate the sensor. The LED previously flashing at a high rate goes out.

Configure FPLT14:

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

- Teach in a pushbutton with a single or double click (factory setting)
- Enter the IDs
- Assign or delete device address

Must be kept for later use!

We recommend the housing for operating instructions GBA14.

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