

## Wireless Powernet meter connector for output FPZ12USB-12 V DC

Wireless Powernet meter connector to output meter telegrams from the 230V power mains via the USB interfaces directly to the FVS-Safe server. Only 0.7 watt standby loss.

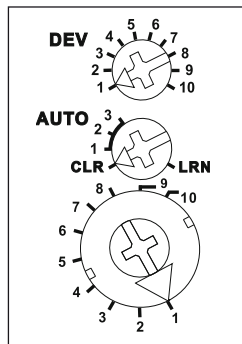
Modular device for DIN-EN 60715 TH35 rail mounting.  
2 modules = 36mm wide, 58mm deep.

**To output meter telegrams in the power mains in up to 30 server networks, up to 30 FPZ12USBs for 30 meters can be connected to form one group. Every FPZ12USB sends only telegrams whose authorisation is saved in the input FPZ12S0.**

The 12V DC power supply is provided by a switching power supply unit SNT12-12V DC that is only 1 or 2 modules wide. With a power consumption of 12W or 24W, it can also power actuators as a rail mounted device.

The length of the 230V transmission line between input and output can be up to 300 metres. It is dependent on the contact resistance of the intermediate connections and the cable layout. If Powernet telegrams are not coupled into other external cables, this can be arranged using a phase coupler so that output can be made to any line.

### Function rotary switches



The own device address is set using the upper rotary switch.

Use the middle rotary switch to teach-in in accordance with the manual. In operation, AUTO1, AUTO2 or AUTO3 is set.

Use the bottom rotary switch to identify the FPZ group in order to limit it from another group which may be located in the same power network.

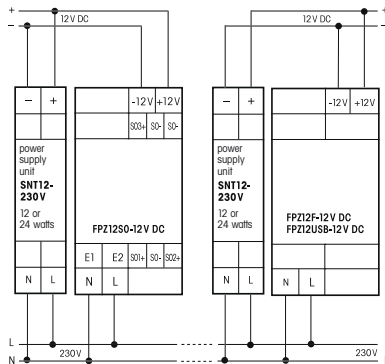
**Initialisation:** Initialisation starts after the power supply is applied, after the address is changed (top rotary switch) or after the group is changed (bottom rotary switch). The green LED lights up for 2s and the red LED lights up for 10s. During initialisation, wireless telegrams continue to be received and buffered. On completion of initialisation the data is sent. In case of extreme faults on the network, the FPZ automatically performs an initialisation.

The green LED indicates received telegrams in operation by blinking briefly.

Up to 30 FPZ12USB devices can be used as outputs in a group. Each FPZ12USB receives its own device address:

- 'DEV' 1..10 and AUTO1;
- 'DEV' 1..10 and AUTO2;
- 'DEV' 1..10 and AUTO3.

### Typical connection



### Teaching-in wireless sensors in wireless actuators

**All sensors must be taught-in in the actuators so that they can detect and execute commands.**

The teach-in memory is empty on delivery from the factory. If you are unsure whether the teach-in memory contains something or not, you must first **delete the memory contents completely:**

Set the middle rotary switch to CLR. The green LED flashes at a high rate. Within the next 10 seconds, turn the upper rotary switch three times to the right stop and then turn back away from the stop. The LED stops flashing and goes out after 10 seconds.

### Deleting individual FPZ12S0:

Set the middle rotary switch to CLR. The green LED flashes at a high rate. Set the bottom rotary switch to the FPZ groups 1..10. Send a teach-in telegram using the FPZ12S0. The green LED goes out. After deletion, set the middle rotary switch to AUTO1, 2 or 3

### Teach-in from FPZ12S0 to FPZ12USB:

Up to 10 FPZ12S0 devices can be taught-in.

1. Set the middle rotary switch to LRN. The green LED flashes at a low rate.
2. Set the bottom rotary switch to the FPZ groups 1..10.
3. Send a teach-in telegram using the FPZ12S0. The green LED goes out.
4. After teach-in, set the middle rotary switch to AUTO1, AUTO2 or AUTO3.

### Teach-in from FPZ12S0 to an evaluation device (PC+FVS-Software):

**Caution:** Only connect one FPZ12USB to a PC.

1. Set the evaluation device to 'teach-in'.
2. Send a teach-in telegram using the FPZ12S0.

### Operational settings

Set the top rotary switch to its own device address (DEV) 1..10. Each FPZ of a group needs to have a different device address (DEV). Set the middle rotary switch to AUTO1, AUTO2 or AUTO3. Set the bottom rotary switch to FPZ group 1..10 to which the FPZ belongs.



When an actuator is ready for teach-in (the LED flashes at a low rate), the very next incoming signal is taught-in. Therefore, make absolutely sure that you do not activate any other sensors during the teach-in phase.

### Important note!

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