

WIRELESS PULSE COUNTER PAFL

PAFL is a wireless pulse counter for Proidual wireless communication system. The counter can be used to measure pulses from the following meters:

- Electricity consumption meter
- Gas flow meter
- Water consumption meter

NOTE: The counter is designed for energy consumption monitoring. It is not suitable for billing purposes.

PAFL transmits the pulse count to the FLTA base station by predefined intervals (6 s...30 min). The interval setting can be made with a trimmer placed inside the device.

PAFL uses the same device profile as TEUFL. You can read the pulse count from the FLTA Modbus registers TE and SP.

PAFL has two power supply possibilities: constant 24 Vac/dc and battery. For pulse frequencies higher than 1 Hz, it is recommended to use a constant 24 Vac/dc power supply.

NOTE: You can use the batteries as a backup energy source when using a 24 Vac/dc power supply.

The indicator light informs about the problems in the network and about the needed service. For example the transmitter alarms when less than 5% of the battery capacity is remaining.

Indicator light behaviour during operation:

| | |
|---------------|---------------------------|
| 1 flash / 2 s | battery and network alarm |
| 1 flash / 4 s | battery alarm |
| 1 flash / 8 s | network alarm |

The commissioning tool FLSER is needed to for connecting the PAFL to the wireless network.

NOTE: The wireless network can be extended by using FLREP or FLREP-U repeaters (up to 8 pcs) between transmitters and the FLTA base station.

Selecting the pre-counting multiplier:

| J2 | J3 | Multiplier |
|----|----|------------|
| ■ | ■ | x1 |
| ●● | ■ | x10 |
| ■ | ●● | x100 |
| ●● | ●● | x1000 |

Selecting the pulse counting method:

| J1 | Pulse counting |
|----|-------------------|
| ■ | from falling edge |
| ●● | from rising edge |



Technical data:

| | |
|---|---|
| Supply | 24 Vac/dc (22...28 V) 3.6 V AA battery, 2 Ah |
| Frequency | 868.30 MHz, Class 1 |
| Range | in the line of sight 500 m inside buildings 20...100 m |
| Transmission power | +8 dBm |
| Reception sensitivity | -109 dBm |
| Modulation | FSK |
| Maximum pulse frequency | 20 Hz |
| Minimum pulse duration | 25 ms |
| Maximum amount of pulses | pre-counting multiplier x 500 000 The counter resets when the maximum amount of pulses is reached. |
| Pulse generator contact | |
| Potential | floating, insulation to earth |
| Resistance | open: >1 MΩ, closed: <2 kΩ |
| Ambient temperature | -40...+50 °C |
| Ambient humidity | 0...100 % rH (non-condensing) |
| Housing | PC plastic, IP54 |
| Estimated battery life with different transmission intervals: | |
| 6 s | 1 year |
| 1...5 min | 2 years |
| 15...30 min | 4 years |

Wiring:

- 1 24 Vac/dc
- 2 0 V
- 3 Pulse generator signal

Ordering guide:

| Model | Product number | Description |
|-------|----------------|------------------------|
| PAFL | 1191170 | wireless pulse counter |

Products fulfill the requirements of directives 2004/108/EC, 2006/95/EC, 1999/5/EC and 2000/299/EC and are in accordance with the standards EN61000-6-3: 2001 (Emission) and EN61000-6-2: 2001.