



# TRP-10, TRP-10-10

## Pulse counter with radio transmission

868 MHz radio module with one or two pulse inputs. Pulse counter with frequent radio transmission according to EN 13757-4 norm, T1 mode (Wireless M-Bus). The device can also be used with the LoRaWAN protocol

### Applications

- Remote meter reading (water, gas, electricity) - AMR
- Building's energy audit
- Remote monitoring of facilities
- Automated billing
- Consumption management
- Leak detection
- "Live" network monitoring
- Customer's consumption profile
- Meter reading, big consumers
- Building's meters reading



### Product description

TRP-10 devices count pulses and transmit their amount over radio.

These devices can be connected to nearly any pulse meter, no matter if it is for water, gaz, electricity, flow or heat.

Data are transmitted accordingly to EN 13757-4, mode T1 norm (also named "Wireless M-Bus"). Transmission works up to several hundreds of meters (in open field).

TRP-10 and TRP-10-10 devices have one, respectively two pulse inputs. When a pulse is detected, a counter is incremented creating thus a virtual index.



A local wireless network can easily be installed with these devices to read, for example, buildings' meters or for energy audits purpose.

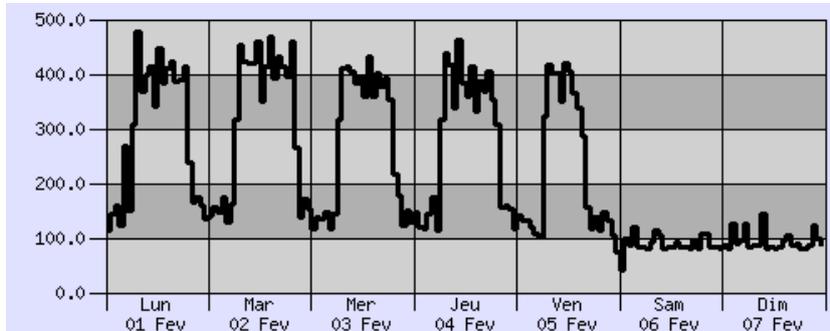
These devices are compatible with Tetraedre's TRMC-18, TRMC-19, TRMC-19-ETH, TRMC-20 and TPT-19 devices that can gather and store the information and transmit all this to a remote server either through GSM, GPRS, Ethernet or PLC.

TRP-10 devices can also be used for mobile reading networks.

The TRP-10 has an internal 3.6V lithium battery allowing up to 15 years of operation (depending on the settings).



TRP-10 can easily be connected to any meter with free potential outputs (relay, reed contact,...). Operation with transistor outputs devices is also possible. TRP-10 have internal screwing terminal blocks.



*Illustration 1: Weekly consumption profile example*

TRP-10 have internal 32-bits counters associated with each pulse input. Each time a pulse is detected, the corresponding counter is incremented. It is possible to set the value of the counter (with Tetraedre's "INF-USB-RJ11" USB adapter), so that it is

synchronous with the mechanical index.

TRP-10 have internal RC filter as well as a configurable software filter. The software filter can limit the maximal frequency range of 0.5Hz to 128Hz.

Usually the TRP sends a radio message every 8 seconds (configurable). The content of the message is updated every 20 seconds (configurable), allowing nearly real-time monitoring.



## Ordering information

TRP-10 devices are available in several versions.

| <i>order name</i> | <i>Description</i>                                  |
|-------------------|---|
| TRP-10-PI         | 1 pulse input, polyester IP66 box, internal antenna |
| TRP-10-PE         | 1 pulse input, polyester IP66 box, external antenna |
| TRP-10-10-PI      | 2 pulse input, polyester IP66 box, internal antenna |
| TRP-10-10-PE      | 2 pulse input, polyester IP66 box, external antenna |

Versions with internal antennas are a little bit cheaper but the signal is weaker.

Dimension : 155x90x55mm (enclosure dimension)

Box : ABS IP65 avec cable gland

### Contact information

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