

## Zenner PDC Module

Part Code	Name	Input	Output
ZE001PC	Zenner PDC Module	Pulse	Wireless MBus

The PulseDataCapture by Zenner is a module for the integration of measuring instruments with pulse output in wireless MBus reading systems. The consumption data of water, heat, gas, oil and electricity meters with pulse output can be converted to Wireless MBus OMS 868MHz. The PDC is battery powered and lifetime is depending on the version, the transmission interval and the ambient conditions but can reach up to 15 years.

**Please Note:** Both, the potential-free (reed) contact and the electronic pulse output can be connected to the PDC. When the PDC module is connected to a meter with an electronic pulse output, we recommend to carry out a compatibility test in case of doubt, since the compatibility may not be guaranteed.

### Features:

- Pulse to Wireless MBus Converter
- 868MHz OMS Output
- Plastic Housing with mounting bracket
- IP54 Protection class (IP68 available as an option)
- Battery powered
- Optical interface for configuration purposes option)



### Variants:

- Standard: Variant with open cable end for connection to third-party meters with pulse output
- Optional: Variant with connected Zenner reed switch pulsers (cable length 1.5m) for the series ETKD-N / ETWD-N, MNK-N, MTKD-N / MTWD-N, RTKD-N (Available on request)
- Variant with two channels available for connection of two pulse output meters

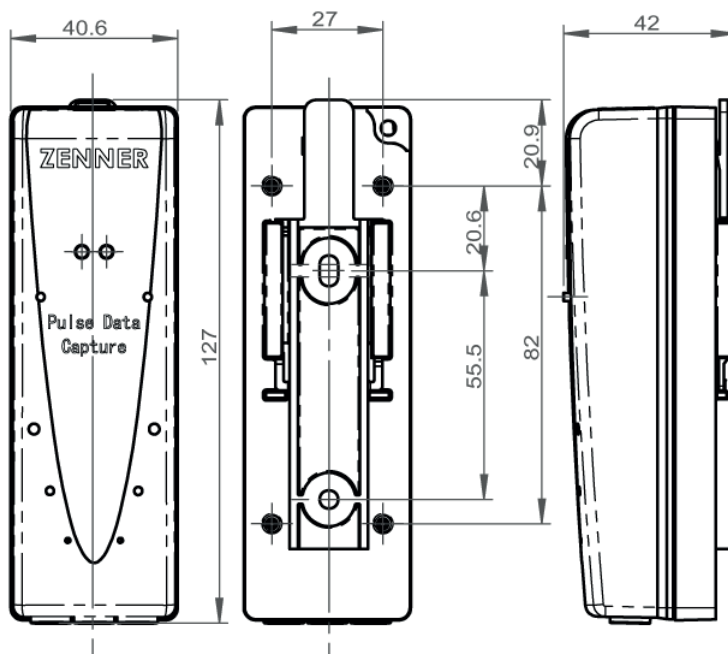
## Technical Specification

### Technical data LoRaWAN® radio module

Operating frequency	868MHz
Transmission power	Approx. 14 dBm, 25 mW
Duration of transmission telegrams	Up to 1 s (depending on spreading factor)
Transmission interval	Standard: daily; optional: monthly
Data transmission procedure	LoRaWAN® class A (bi-directional communication)
Encoding of radio protocols	Yes
Error detection	CRC
Optional interface	Yes
Energy supply	Lithium battery
Battery life	10 years + reserve
Battery status monitoring	Yes
Display	No
Protection class	IP68 (IP54 on request)
Ambient conditions	10 °C to +40 °C; -15 °C to +60 °C
CE conformity	According to directive 2014/53/EU (RED)
Activation of the radio interface:	By illuminating the IR diodes with a light source or by Zenner optical head via the IrDA interface

### Datalogger (readable via optical IrDA interface)

Annual due date values	2
Monthly values	18 plus 18 half-monthly values
Daily values	32



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### LoRaWAN® radio telegram

Protocol content	Interval
Serial number (DevEUI)	Once when logging into the LoRaWAN® network
Device specific information (firmware version, LoRaWAN® version, device type)	Six-monthly
Due date value and date	Every year on due date
Medium of device at selected channel, serial number and possibly manufacturer of device at selected channel	Second day after first commissioning and every six months

### Scenario 1 (monthly)

Protocol content	Interval
Monthly value (previous month), actual date and time	Monthly (beginning)
Monthly value (previous month), actual date and time	Monthly (middle)

### Scenario 1 (daily)

Protocol content	Interval
Daily values (previous day)	Daily
Status information, actual date and time	Monthly



### Data Collection

Wired Networks

Wireless Networks

IoT Technologies

Mbus & Pulse for any network

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