

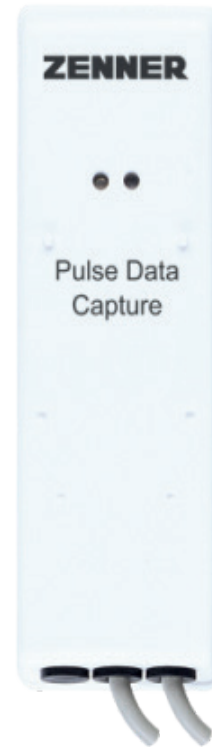
 www.zenner.de

 [www.zenner.de / newsletter](http://www.zenner.de/newsletter)

 /zennernews

 /zenner_news

 /company/zennernews



FUNKTECHNOLOGIE INTELLIGENT UND PRÄZISE.



Ganz einfach. Mit Funktechnologie von ZENNER.

PDC communication module

to connect meters with pulse output
with LoRaWAN® or wireless M-Bus radio interface

ZENNER



CONTENTS

PDC communication module with LoRaWAN® radio interface 2

PDC communication module with wireless M-Bus radio interface 5

PDC communication module

to connect ZENNER meters with pulse output

with LoRaWAN® radio interface

The Pulse Data Capture (PDC) communication module with LoRaWAN® radio interface integrates pulse output meters into LoRaWAN® readout systems.

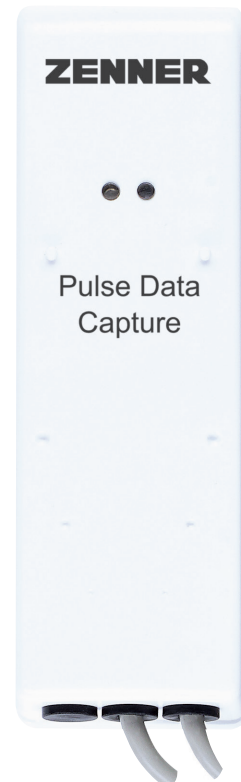
This allows wireless transfer of consumption data from water, heat, gas, or electricity meters to LPWAN networks. Depending on the version, transmission interval and ambient conditions, the module achieves a battery lifetime of up to 10 years.

Performance characteristics at a glance

- Composite housing with wall mounting bracket
- Battery powered
- Flood-proof IP68 (IP54 on request)
- Optical radio interface for configuration purposes

Variants

- Variant with two channels available for connection of two pulse output meters



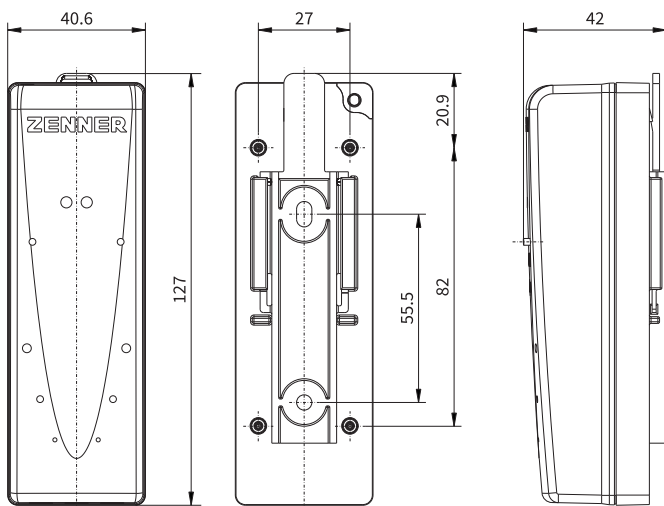
PDC communication module with LoRaWAN® radio interface

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 radio 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 radio interface

Datalogger (readable via optical IrDA radio interface)

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



Dimensions

PDC communication module with LoRaWAN® radio interface

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

Szenario 1 (monthly)

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

Scenario 2 (daily)

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

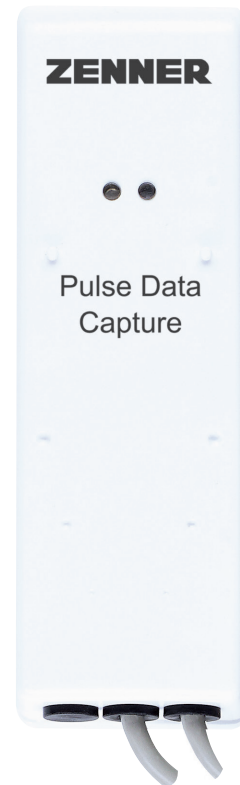
PDC communication module

to connect meters with pulse output

with wireless M-Bus radio interface

The Pulse Data Capture (PDC) communication module with wireless M-Bus radio interface integrates pulse output meters into wireless M-Bus readout systems.

This allows wireless transfer of consumption data from water, heat, gas, or electricity meters to wireless M-Bus networks. Depending on the version, transmission interval and ambient conditions, the module achieves a battery lifetime of up to 12 years.



Performance characteristics at a glance

- Composite housing with wall mounting bracket
- Battery operation
- Protection class IP68
- Optical radio interface for configuration purposes

Smart Metering functions

- Self-monitoring
- Leakage detection
- Meter Stop detection
- Meter oversized detection
- Meter undersized respectively pipe burst detection

Variants

- Variant with two channels available for connection of two pulse output meters

PDC communication module with wireless M-Bus radio interface

Technical data wireless M-Bus-radio module

Operating frequency	868 MHz
Transmission power	approx. 14 dBm, 25 mW
Duration of transmission telegrams	≥ 1 ms
Transmission interval	Standard: 40s; other scenarios on request
Data transmission procedure	Wireless M-Bus (standard: T1 mode), others on request
Encryption of radio protocols	yes
Error detection	CRC
Optical radio interface	yes
Energy supply	Lithium battery
Battery life	between 6 and 12 years plus reserve, depending on the selected transmission scenario, occupied input channels and ambient conditions
Battery status monitoring	yes
Display	no
Protection class	IP68
Ambient conditions	> 0 °C bis + 55 °C
CE conformity	according to directive 2014/53/EU (RED)
Activation of the radio radio interface	using MinoConnect Set, Zenner opto head and MSS configuration software; Autostart after receiving 10 pulses

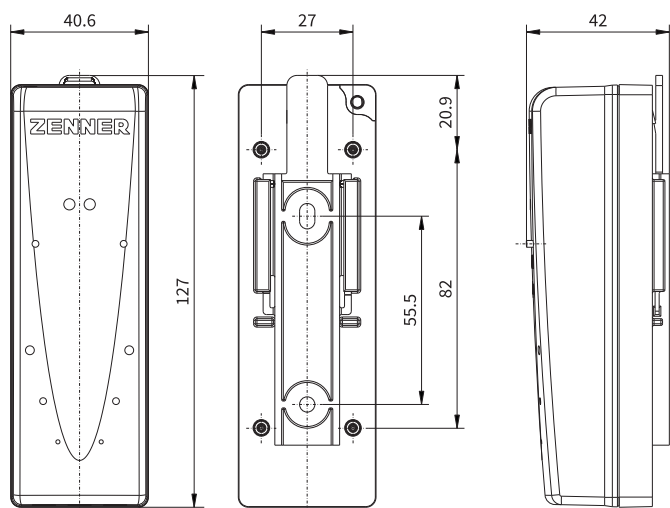
Datalogger (readable via optical IrDA radio interface)

Annual due date values	4
Monthly values	18 plus 18 half-monthly values
Daily values	96
Quarter-hour values	96

Telegram content	Typ A*	Typ B*	Typ C**
Current value	✓	✓	✓
Current date	✓	✓	
Due date values		✓	✓
Current value	✓	✓	✓
Another 11 monthly values	✓		
Status information 1	✓	✓	✓
Status information 2	✓	✓	✓

* Data telegram according to DIN EN 13757-4

** wM-Bus, manufacturer specific data telegram



Dimensions

ZENNER International GmbH & Co. KG

Heinrich-Barth-Straße 29
66115 Saarbrücken
Germany

Phone +49 681 99 676-30
Fax +49 681 99 676-3100
E-Mail info@zenner.com
Internet www.zenner.com