

# Holosys M-Bus PulseReader Px



- Two (P2 device) or four (P4 device) independent meters readout
- In accordance with M-Bus EN 13757-2 and EN 13757 standards
- Primary and secondary addressing
- Meter reading on due date
- Two-tariff systems readout
- High-capacity battery in case of M-Bus power supply failure
- Non-erasable memory in case of battery discharge
- Wide temperature range

**Holosys M-Bus PulseReader Px** is a device for two (P2 device) or four (P4 device) independent meters (water, gas, heat, electricity) readouts in accordance with EN 13757-2, EN 13757-3, and EN 1434-3 standards. Holosys M-Bus PulseReader is represented as two (P2 device) or four (P4 device) independent M-Bus slave devices in the M-Bus system.

## KEY FEATURES

For each of the M-Bus slave devices presented by the PulseReader, the user can assign one primary and one secondary address. Support for secondary addressing makes the device suitable for implementation in M-Bus systems with more than 250 M-Bus slaves.

The device is equipped with due date meter reading function. Meter readout data are stored separately for each input on the date defined by the user. Thereby it is easy to track the consumption of a certain utility meter.

Holosys M-Bus PulseReader has an integrated support for systems with two different tariffs. In such operating mode, one of the inputs for non-voltage contacts is used for pulse counting while the other input is used for tariff switching. Model P2 supports one, and P4 two dual-tariff meters.

In case of power supply or M-Bus failure, the device is equipped with an internal battery. The device monitors power supply voltage levels and in case of power loss on the bus, the device automatically switches to battery power to ensure the continuity of pulse counting and data integrity. The device also saves the data on a daily basis into non-volatile memory in case of battery discharge.

## TECHNICAL CHARACTERISTICS

Input potential	floating, resistance to ground > 1M $\Omega$
Source resistance	open > 1M $\Omega$ , closed < 2k $\Omega$
Max. source capacity	2nF (short sampling), 12nF (long sampling)
Min. pulse duration	33 ms
Min. pause between pulses	33 ms
Max. pulse frequency:	15 Hz
Input current:	30 $\mu$ A
Contact voltage	2.5V ... 3.6V
Power supply	M-Bus powered / automatically switched to integrated battery supply in case of power failure
M-Bus current load:	1UL= 1.5 mA
Battery operation mode consumption	30 $\mu$ A (long sampling) Short sampling extends battery lifetime ~ 12%
Battery operation mode battery lifetime	Standard: ~ 11 month Optional: ~ 6 years Premium: ~ 7 years
Battery lifetime during 10 years operation period (25°C)	Standard: ~ 32 days/year Optional: ~ 180 days/year Premium: ~ 210 days/year
<b>M-Bus interface</b>	
Standard	EN 13757-3, EN 1434-3
M-Bus quiescent current	L < 1.5 mA (MARK current)
M-Bus current	H= L (MARK current) + 13 mA typ. (SPACE current)
M-Bus drive	Texas Instruments TSS721
Protection resistance	2 x 215 $\Omega$
Data transfer rate	300, 2400, 9600 baud with automatic transfer rate speed detection
Addressing (each input)	One primary and one secondary address
<b>General data</b>	
Housing	Material: Thermoplastic Dimensions (w x h x l): 75 x 74 x 40 mm Color: Light gray Protection type: IP68 Mounting: Bolts on the mountable surface
Operating temperature range	-20°C ...+60°C