

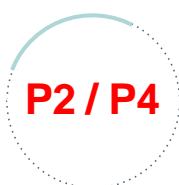


## Holosys M-Bus PulseReader P2/P4

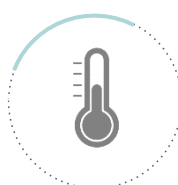
Holosys M-Bus PulseReader is a device used for collecting consumption readouts with support for two (P2) or four (P4) independent utility meters (water, gas, heat, electricity). The modules come with a non-erasable memory and a high-capacity battery in case of M-Bus power supply failure. Support for secondary addressing makes the device adequate for implementation in M-Bus systems with more than 250 M-Bus slaves.



**M-Bus in accordance  
With EN 13757-2, EN  
13757-3 and EN 1434-3**



**Two-channel and  
four-channel  
versions**



**Wide  
temperature  
range**



**Support for  
meter reading  
on due date**

- Support for primary and secondary addressing
- Integrated support for systems with two different tariffs. In such operating mode, one of the inputs used for pulse counting while the other for tariff switching
- High-capacity battery in case of M-Bus power supply failure
- In case of power outage or M-Bus failure, the device automatically switches to battery power to ensure the continuity of pulse counting and data integrity



- device adequate for M-Bus systems with more than 250 M-Bus slaves.
- Humidity: up to 70%
- The device is equipped with the function of due date meter reading. Meter data is saved separately for each input on the date defined by the user.
- The device also saves the data on a daily basis in a nonvolatile memory in case of battery discharge
- Operating temperature range: from -20 to 60 C°

## TECHNICAL CHARACTERISTICS

Pulse input data	
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	$\mu$ A
Contact voltage	2.5V ..3.6V
Consumption	
Power supply	M-Bus powered / automatically switched to integrated battery supply in case of power outage
M-Bus current load	1 unit load 1UL= 1.5 mA
Consumption in battery operation	30 $\mu$ A (long sampling)
Battery lifetime in battery operation (25°C)	Standard: $\approx$ 11 month Optional: $\approx$ 6 years Premium: $\approx$ 7 years
Min. support at duration of 10 years	Standard: $\approx$ 32 days/year Optional: $\approx$ 180 days/year Premium: $\approx$ 210 days/year
Short sampling	Extends battery lifetime for $\approx$ 12%
M-Bus data	
Standard	EN 13757-3, EN 1434-3
M-Bus quiescent current	L < 1.5 mA (MARK current)
M-Bus current	H=L (quiescent current) + 13 mA typ. (SPACE current)
M-Bus drive	Texas Instruments TSS721
Protection resistance	2 x 215 $\Omega$
Data transmission rate	300, 2400, 9600 baud with automatic speed detection
Addressing (each input)	1 primary and 1 secondary address
Data structure	Configuration type - changeable structure (Low Byte First, Cl: 72h) Length- 53 Byte 1. data record – counter 2. data record – date and time 3. data record – last due date 4. data record – last due date counter 5. data record – next due date 6. data record – manufacturer data
Configuration	Identification number, medium, primary address, pulse constant, measuring unit, tariff mode, date and time of the next due date, it could be parameterized by SND_UD the next due date, it could be parameterized by SND_UD telegram
Environment	
Working temperature range	from -20 to 60 C°
Storage temperature range	from -20 to 70 C°
Humidity	up to 70% (without condensation)
Housing	
Material	Thermoplastic
Dimensions (w x h x l)	75x74x40 mm
Color	Light gray
Ingress protection	IP20 (IP68 option)
Counting	Bolts on the basis
Connection dimension	Sensor up to 1 mm <sup>2</sup> M-Bus up to 2,5 mm <sup>2</sup>