

FROM MEASUREMENT TO INFORMATION MANAGEMENT





APT-MBUS-NA-2

for M-Bus connectivity

The APT-MBUS-NA-2 re-transmitter module is designed to collect readings from water meters and to transmit data using the M-Bus communication standard, according to PN-EN 13757-3. This use of an open communication protocol means full compatibility with the wide range of devices which make up the remote data reading and transmission structure. Includes an event detection and logging module.

The APT-MBUS-NA-2 re-transmitter is based on a microprocessor system, with optical sensors used to read the data from water meters and detect the direction of water flow, for example, which ensures complete consistency of readings and water meter data. Thanks to the integrated emergency power supply battery, the re-transmitter module can function for up to 5 years without a power supply from M-Bus.

INTENDED USE

This module is intended for installation on JS Master line water meters: JS 6,3 Master+, JS 130-6,3 Master+, JS 10 Master+, JS 10-G1¼ Master+, JS 130-10 Master+, JS 130-10-G1¼ Master+, JS 16 Master+, JS 130-16 Master+, JS 6,3 Master C+, JS 130-6,3 Master C+, JS 10-G1¼ Master C+, JS 130-10 Master C+, JS 130-10-G1¼ Master C+, JS 130-10-G1¼ Master C+, JS 16 Master C+, JS 130-16 Master C+.manufactured by Apator Powogaz S.A.



TECHNICAL SPECIFICATIONS

| Parameter | |
|------------------------|---|
| Cable length | depending on re-transmitter model* |
| Communication protocol | M-Bus |
| Consumption detection | optical |
| Primary power source | M-Bus |
| Emergency power source | 3,6 V lithium battery |
| Battery capacity | 1200 mAh |
| Protection class | IP65 |
| Battery life | up to 10 years when the module is connected to the MBUS network** |
| Baud rate | 300, 2400, 9600 [b/s] |
| Cable | YTLY 2 x 0,14 mm ² |
| Mounting | directly on the water meter |
| Dimensions | h = 44,2 mm; s = 65,5 mm |
| Weight | 0,079 kg |
| Operating temperature | 0°C ÷ 60°C |
| Addressing | primary and secondary |



KEY FEATURES

- Non-integrating and easy to install on water
- Primary power is supplied from the M-Bus system (re-transmitter current is one load unit, UL=1.5 mA)
- Thanks to the emergency supply, continuity of operation is maintained during any loss of power supply from the M-Bus system
- Detection, recording and signalling of irregularities in water consumption measurements, and clip-on module operation using event signalling
- Configuration of event thresholds and transmission rate
- Measurement data readouts from the water meters are completely resistant to any interference caused by external magnetic fields
- Compatibility with devices used for remote reading and transmission of measurement data, using the M-Bus communication protocol
- IP65 protection rating

EVENT SIGNALLING

Maximum Flow

Minimum Flow Reverse Flow

No flow

teakage

Device disconnection

Magnetic field detection Strong light detection

Low battery voltage

Indicator Error

Detector failure

Processor Reset

DATA FRAME CONTENT

- Device factory number
- Device date and time
- Saved date of readout
- Temporary volume
- Recorded volume
- Measurement time
- Flow
- Current event flags
- Diagnostics function for optics
- Oscillator diagnostics



 $^{^\}star$ re-transmitters are available with different cable lengths, see the product price list. ** battery life at an ambient temperature of 25°C of up to 5 years .