Cyble™ M-Bus
Cyble technology for water meter remote reading with M-Bus protocol

Cyble communication modules have been designed to fulfill requirements of all water management utilities willing to remote read their water meters. As water meters are an important investment for utilities, all Itron water meters are pre-equipped considering actual or future evolutions towards remote reading technologies. The Cyble M-Bus facilitates the integration of Itron water meters into a M-Bus network. This module offers advanced reading functionality that enables the utilities to offer additional services to their customer.

FEATURES & BENEFITS

» Magnetic tampering is impossible since the non-magnetic target is not influenced by an external magnet.
» As the detection is by change of induction the unit can be operate in floaded pits.
» It is designed to withstand harsh environments (IP68).
» The Cyble M-Bus complies with E.M.C. standards for protection against electromagnetic disturbances.

Powerful and Advanced Features
Transmission of standardized data:
» Date and time.
» Primary and secondary address.
» Volume and back flow indexes.
» Alarms: tampering detection and low battery.
» Customer ID (10 digit alpha-numerical).
» Peak flow management (memorization over the last 13 months).
» Monthly Fixed Date Reading (FDR) of volume over the previous 13 months: Tariff applications, Tenant change, ...
» Leakage Detection above 2 thresholds recorded over the previous 13 months.
» Backflow detection (temporary or permanent) records over the previous 13 months.

Standards Compliance
» M-Bus according to EN1434-3 and 13757-3 in the scope of the CEN TC 294 WG4.
» Leap years integrated up to 2031.
» EEC marking.

Cyble Compatibility
The Cyble M-Bus is completely compatible with all Itron water meters equipped with the Cyble target.
» It can be easily retrofitted and installed on meters already on the field.
» With a few easy installation steps, the meter seal and protective cap do not need to be broken or dismantled.
» It can be shipped already mounted (and configured) on the meter.

High Reliability
With the proven and patented Cyble detection technology the electronic index of the Cyble M-Bus is always the mirror image of the mechanical index. The integrity and reliability of this data is key for use in billing applications.

Pre-equipped register with the Cyble Target
**M-Bus features**
- Compliant with EN1434-3 and EN 13757-3
- Baud rate 300 to 2400 bps
- Cable 2 wires, non polarized cable

**Functional Specifications**
- Operating temperature: -10 °C/+55 °C
- Storage temperature: -20 °C/+55 °C
- Case protection: IP68
- E.M.C. standards: EN 50081-1, 50081-2, 50082-1, 50082-2
- Power source: Lithium battery
- Battery life* time: 12 years (Note: since the M-Bus communication is powered by the bus, the number of readings does not affect the battery life time)
- Cable dimensions: 3 m two wire cable, 2 x 0.25 mm²

* Under normal applications within the specified working temperature range

**ACCESSORIES AND REMOTE READING SYSTEMS**
To complete your M-Bus installation a broad range of accessories and remote reading systems are available.

**APPLICATIONS**
- Individual properties
- Multiple properties
- Combined properties
- Commercial buildings
- Industrial application

**TARGET PRINCIPLE**
- Target present
- Target absent

Delivered with
- 3 m cable
- Fixing screw
- Plastic seal

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