

Cyble™ M-Bus

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

Cyble communication modules have been designed to fulfil 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.

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.

- > 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 flooded 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 and flow rate 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 EN1434-3 standard and included in the scope of the TC294 WG4.
- > Leap years integrated up to 2031.
- > EEC marking.

Applications

The Cyble M-Bus suits to remote reading applications through M-Bus networks in residential, commercial and industrial uses.

It provides all relevant data according to EN 1434.



- > Pre-equipped register with the Cyble Target

M-Bus features

Compliant with	EN1434-3
Baud rate	300 to 2400 bps
Cable	2 wires, non polarized cable

Functional specifications

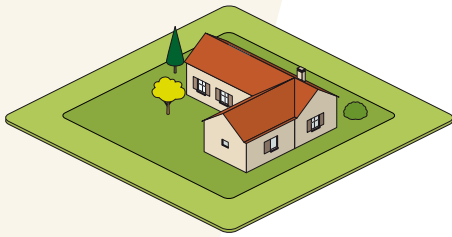
Operating temperature	-10 °C/+55 °C
Storage temperature	-20 °C/+55 °C
Case protection	IP68
E.M.C. standards	EN 50081-1, 50081-2, 50082-1, 50082-2
Power source	Lithium battery
Battery life time*	12 years (Note: since the product is powered by the bus, the number of readings does not affect the battery life time)
Cable dimensions	6.6 x 2.3 mm flat cable

* 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



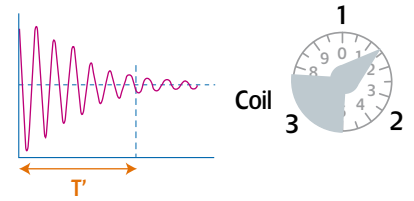
- > Individual properties
- > Multiple properties



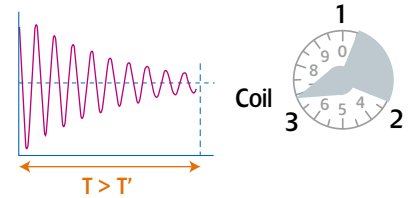
- > Combined properties
- > Commercial buildings
- > Industrial application

Target Principle

> Target present



> Target absent



> Delivered with

- 5 m cable
- Fixing screw
- Plastic seal
- Specific lid

About Itron Inc.

Itron Inc. is a leading technology provider to the global energy and water industries. Our company is the world's leading provider of metering, data collection and utility software solutions, with nearly 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water. Our products include electricity, gas and water meters, data collection and communication systems, including automated meter reading (AMR) and advanced metering infrastructure (AMI); meter data management and related software applications; as well as project management, installation, and consulting services. To know more, start here: www.itron.com

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