



Technical Guide SIT1.4

EverBlu Cyble Enhanced

EverBlu Cyble Enhanced has been designed to fulfill requirements of all water management utilities willing to remote read their water & gas meters by radio a fixed network to improve their productivity and sell extra services to their customers.

The EverBlu wireless fixed data collection system is suitable for any meter type (Water, Gas, Heat and Cooling) and for various site topologies, either in urban, suburban or rural environments.

EverBlu Cyble Enhanced creates a set of granular data that is automatically communicated daily to the utility back-office server. Its radio function remains on duty during working hours to reply to on-request reads from utility operators.

To secure data transmission and avoid radio signal collisions, the EverBlu MIU combines special communication algorithms and daily clock synchronization with the network. In case of communication failure caused by radio disturbances, the EverBlu MIU stores meter information and automatically re-attempts data transmission several times during the current day and the next day.

BENEFITS OF WIRELESS SOLUTION

- » Automatic radio meter reading increases the reading reliability and significantly enhances the data acquisition speed.
- » The radio reading also opens accessibility to all meters even if the customer is absent or in hard to read locations.

EverBlu Cyble Enhanced Working Technologies

- » The Itron patented and proven Cyble technology guarantees the transmitted index reliability.
- » The RADIANT technology is the most open radio protocol, resulting from the work of a European user group.

Ease of Installation

The EverBlu Cyble Enhanced is completely compatible with all Itron water meters (from 15 to 500 mm) & gas meters equipped with a Cyble target register.

This compact module can be easily fixed directly on the meter, without requiring any wiring nor wall mounting.

It can be shipped from the factory already mounted (and configured) on to the meter. As a stand alone it can be quickly retrofitted to meters installed in the field without breaking any seals.

Advanced Functions

EverBlu Cyble Enhanced provides powerful smart functions, adding value for your customers:

- » Daily 24 hourly index.
- » Daily leakage alarm
- » Daily backflow alarm

- » Tampering alarms
- » End of battery lifetime indicator
- » Water intelligence alarms:
 - meter oversized
 - meter undersized
 - meter blocked
 - peakflow

Data from EverBlu Cyble Enhanced can also be collected using AnyQuest, the Itron mobile reading solution. Thus allowing dual-mode collection systems or free migration from walk-by to fixed network systems.

Consistent Reliability

- » The Cyble concept ensures the perfect correlation between the meter register and the internal electronic index (taking accidental backflows into account).
- » The electronic unit is encapsulated to protect it from harsh environment and water immersion effects.
- » The EverBlu Cyble Enhanced case is made of carbon fibers, which makes it resistant to shocks and UV-light.
- » The RADIANT technology gives the best radio communication even in congested areas.

Radio Frequency Features

Protocol	RADIAN / EverBlu
Modulation	Frequency Shift Keying
Frequency carrier	433.82 MHz
Radiated power	≤ 10 mW
Transmission	Symmetrical 2-way communication

Functional Specifications

Dimensions	92 x 57 x 50 mm
Power source	Lithium batterie
Battery typical lifetime*	15 years / 10 years in fixed network mode
Case protection	IP68
Relative humidity	0 to 100% - submersible
Operating temperature**	-10°C / +55°C***
Accidental temperature	-20°C / +70°C
Conformity	CE certified, in accordance with the European R&TTE directive (1999/5/EC)

* Under normal applications within the specified operating temperature range.

** High Temperature (HT) version also available on request.

*** Operation: +5°C to +35°C / Storage: +5°C to +35°C / Transport: Min. -20°C (< 24 hours continuous), Max. +70°C (< 24 hours continuous) / Min. operational temperature: -10°C (< 15 days/years) / Max. operational temperature: +55°C (< 15 days/years).

Application

The EverBlu Cyble Enhanced is suited to various applications for residential, commercial and industrial uses.



EverBlu Cyble Enhanced fitted on Residential water meter



EverBlu Cyble Enhanced fitted on Commercial and Industrial water meter

