

# Cyble RF

## Radio Module for Remote Water Meter Reading

### Key Features

- ▶ Ease of Installation
- ▶ Advanced Functions
- ▶ Consistent Reliability

Cyble RF has been designed to fulfill requirements of all water management utilities willing to remote read their water meters by radio in order to improve their productivity and sell extra services to their customers.

#### 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.

#### Cyble RF Working Technologies

- The Actaris 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 Cyble RF is completely compatible with all Actaris water meters (from 15 to 500 mm) 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

In addition to the index reading, Cyble RF also provides powerful smart functions, adding value for your customers:

- Monthly index records spanning 13 months
- Leakage detection and monthly records spanning 13 months
- Backflow detection and monthly records spanning 13 months
- End of battery lifetime indicator
- Tampering alarms,...

#### 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 Cyble RF 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.



## Reading System

Actaris offers a complete Data Collection System including a handheld terminal\* particularly convenient for radio reading water meters equipped with Cyble RF.

Using the integrated route software, the reader can ergonomically collect meter data either by standard keying method or by radio transmission, and download it at the utility office.

\* see specific leaflet



► Cyble RF fitted on Residential water meter



► Cyble RF fitted on Commercial and Industrial water meter

## Technical Characteristics

### Radio Frequency Features

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

### Functional Specifications

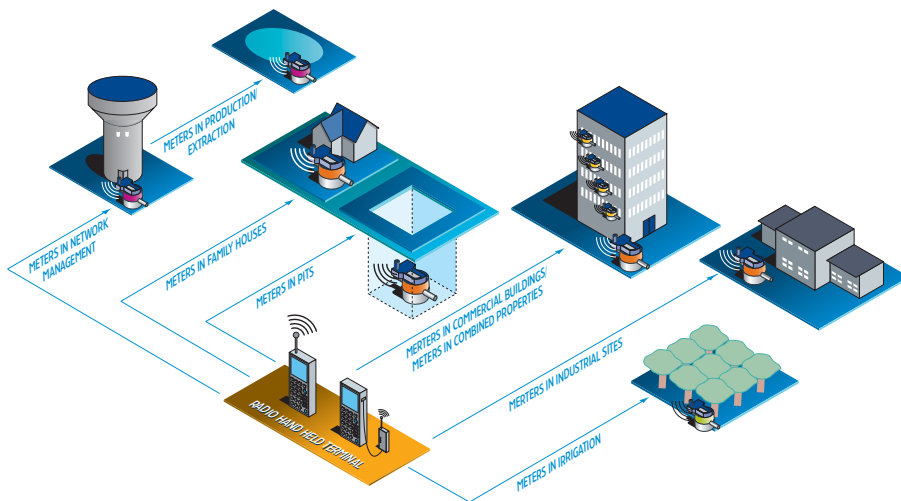
Dimensions	120 x 59 x 50 mm
Power source	Lithium batteries
Battery typical lifetime*	15 years
Case protection	IP68
Relative humidity	0 to 100% - submersible
Operating temperature	-10°C / +55°C**
Accidental temperature	-20°C / +70°C
Conformity	CE 0536 certified, in accordance with the European R&TTE directive (1999/5/EC)

\* Under normal applications within the specified operating temperature range.

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

### Application

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



For more information, please contact your local agency.

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