Click-On. Dual-stack LOR-1 module

The Click-on Dual-stack LOR-1 module enabled by the LoRaWAN® standard or wM-BUS offers versatile connectivity options for IoT applications.

Installation on water meters for taking readings from the speed disk using optical sensors and data transmission via LoRaWAN® or connect using wM-BUS (EU EN13757-4).

Field of application: cold and hot water supply systems in apartments, private houses, enterprises and other public utilities.

Supported meters

- Vane-wheel (DN 15-20) water meters consisting of two main elements: a measuring device and a counting mechanism. Measuring range up to R200

- JS Q3 Smart+ (C+; D+); JS90 Q3 Smart+(C+; D+) (production of "Apator Powogaz S.A.", Poland)

The Dual-stack LOR-1 module works by integrating two communication protocols into a single device, allowing it to support both LoRaWAN® and wM-BUS connectivity.

1. LoRaWAN® Communication: The module can communicate with LoRaWAN® networks. It transmits and receives data packets over long distances, making it ideal for IoT applications that require low power, long-range connectivity.

2. wM-BUS Communication: The module also supports the wM-BUS protocol, which is commonly used for wireless metering applications. It enables the module to communicate using the wM-BUS (EN13757-4 standard) for data transmission.

Dual-Stack Capability: The module is designed to handle both LoRaWAN® or wM-BUS communication independently. This dual-stack capability allows for flexible deployment in diverse IoT scenarios where devices may need to communicate using either connection technics.

Users can configure the module's settings, such as network parameters, communication frequency, data rate, and encryption keys, to ensure seamless integration with the target network infrastructure.

Specifications

Installation method	**Battery**
Click-On. Directly on the water meter. Dual-stack wM-BUS or LoRaWAN®	LiSOCL$_2$ 3.6V Type AA / SAFT LS14500
Water meter pulse counting method	**Operating temperatures**
Optical sensor	0...+55 °C
Frequency plans supported by default	**Ingress protection rating**
EU 868: 863-870 MHz	IP65, IP68* (special request)
Activation type	**Package dimensions (height; D)**
OTAA	33,9 mm; 65,5 mm
Transmitter power	**Weight (without antenna)**
25 mW	0,05 kg
Radio coverage within line of sight	**Antenna type**
Up to 5 km	Internal
Number of daily billing entries	**Battery life (1 transmit / day)**
Up to 349	>12 years

10,9 mm

33,9 mm

65,5 mm

65,5 mm

TÜV SÜD

LoRa Alliance® Member
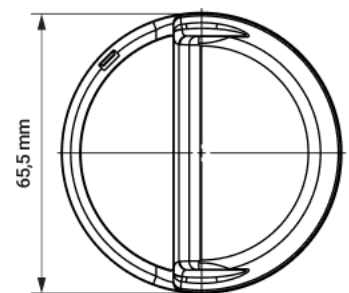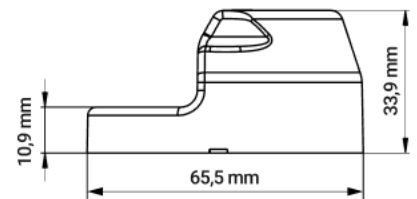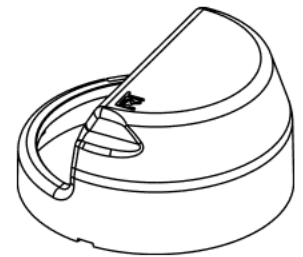
Use of the LoRa Alliance® Member and LoRaWAN® marks is pursuant to license from the LoRa Alliance®