

ECLIPSE REPEATER

BATTERY-POWERED WMBUS REPEATER



ECLIPSE is a battery-powered device used to repeat and thus extend the range of radio signals transmitted by radio modules on water meters, heat meters and heat cost allocators.

The device supports Wireless M-Bus and OMS standards and allows the creation of repeater chains (multi-hop) to increase the range of the network.

It provides up to 11 years of uninterrupted operation without battery replacement, making it ideal for large measurement networks requiring minimal maintenance and simple installation.



Performance

ECLIPSE is equipped with a latest-generation energy-efficient computing unit and an 868 MHz radio communication module, which allows the device to operate continuously for up to 11 years without the need to replace the battery.

Reliability

The high-sensitivity 868 MHz radio receiver allows for reading measuring devices installed in hard-to-reach places. The high-power 868 MHz transmitter allows for remote communication with meters for the purposes of reconfiguration, alarm clearing or diagnostics.

Flexibility

ECLIPSE supports not only various communication protocols, but also various measuring devices from different manufacturers, making it an open and universal solution. Intelligent algorithms for creating connections between repeaters and gateways (multi-hop) allow for network coverage of up to two thousand measuring devices.

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Safety

Built-in sensors that detect when the enclosure is opened or removed from its base enable quick detection of vandalism or theft.

Ergonomics

Easy to install and configure – mounting to the floor and configuring the device takes just a few minutes and requires no specialist knowledge or tools.

Aesthetics

The casing, designed with aesthetic interiors in mind and made of high-quality plastic, makes ECLIPSE blend in perfectly with its surroundings and can be installed in stairwells, galleries, etc.

TECHNICAL SPECIFICATIONS

Radio frequency/power	868 MHz to 14 dBm
Supported radio protocols	W-Mbus EN13757-4, OMS
Supported modes	T1, C1, S1
Maximum number of WMBus devices	2000 devices
Configuration and diagnostics	Locally (USB/Android app) or remotely
Radio sensitivity	-105dBm
Power supply	3.6V lithium battery / 38,000 mAh (optional 85-305 VAC/100-430 VDC, max. 15 W)
Battery life	11 years
User interface	RGB LED button: Reset (device reset) button: Action (WMBus communication test, return to factory settings)
Antennas	Internal
Dimensions (width/length/height)	127 mm / 48 mm / 164 mm
Weight	530 g
Protection class	IP20
Storage temperature	from -20°C to +65°C
Operating temperature	from 0°C to +55°C