MERLIN 868 wMBus module
Product Specification

OMS conform and interoperable radio communication

- Module for MJ portfolio (M100i; M120i)
- Module for Vol and SJ portfolio (V200/V210; S150; S220)
- wMBus acc. EN13757-4, OMS compliant
- AES-128 data encryption; Encryption Modes 5 and 7

MODULE SPECIFICATION	
Frequency band	868,95 MHz Wireless M-Bus radio; Mode T
Encryption	Supports Mode 5 and Mode 7
Transmission power	25 mW
Transmission mode	T1; unidirectional
Battery	3.6V lithium
Battery lifetime	Up to 15 years
Radio range	Up to 500 m
Conformity	CE-certified, in compliance with the European RED directive
Sensing	Inductive with 3 coils, non-reactive
Protection class	IP68
Operating temperature	-15ºC to +55ºC
Storage temperature	-20ºC to 70ºC
Meter compatibility	MERLIN MJ 868 wMBus: M100i; M120i MERLIN 868 wMBus: V200; V210; S110; S150; S220

Operation

One way radio communication with a fast transmission interval for optimised Drive-by read out.

MERLIN 868 wMBus clip on radio modules allow an interoperable mobile or stationary remote reading of Honeywell's residential water meter range. For an easy and fast read out the module sends meter information as meter index, historic values and operating information periodically. The transmitted data can be received by various mobile receivers or gateways.

Data information

Information for billing purposes and advanced meter analysis.

The MERLIN 868 wMBus modules provide a variety of meter consumption and analysis data. The current meter reading is completed by two data loggers that provide an annual due date value as well as, e.g. monthly, consumption histories.

Beyond the pure consumption data, multiple meter and measurement point status information are transmitted in the telegram. Most common information for tampering attempts, backflow, leakage and batter low are completed by advanced status information for e.g. the dimensioning of the meter (oversized or undersized) or the environmental conditions (Frost risk).

Easy installation

Retrofit possibility on already installed meters.

The clip on modules can be delivered paired and configured on the chosen meter type and size, no matter which meter type is used (Volumetric, Single-Jet or Multi-Jet).

For an easy configuration or pairing process in the field, a radio USB stick as local configuration interface is supplied for Notebooks or PC´s. A special "configuration switch" on the module allows an easy access to the configuration interface and protects the unauthorized configuration access.

Data security

A secured data communication allows a safe use in all Smart metering applications.

All data are protected by an AES 128-bit encryption algorithm. The wMBus data encryption Modes 5 and 7 (acc. EN13757-7) are supported and allow the secure use of the modules in mobile and stationary networks. Depending on the customer application it is possible to provide unique encryption keys to each module or to create a unique customer key that is valid for the used modules.

Data collection

Interoperable and open telegram information allow an easy integration in 3rd party applications.

The compliance to the wMBus radio protocol defined in the standard EN13757-4 and the OMS compatibility allows an interoperable use of the MERLIN 868 wMBus modules with multiple hardware and software components, available on the market.

For a smooth changeover from an installed mobile read out system based on proprietary radio protocols (like our Wavenis system or radio platforms from other meter manufacturers) to the interoperable wMBus solution, HONEYWELL offers the best suited MDC reading solution for a mix of visual read and RF enabled meters.

METRo; Honeywell´s multi-vendor mobile read out solution.

For more information

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