

Wireless M-Bus Radio Module for Wehrle Modularis water meter



Application

The retrofittable wireless M-Bus radio module **Supercom 587** is suitable for E. Wehrle GmbH water meters:

- Modularis single-jet and multi-jet dry meters.
- Modularis cylindrical piston meters.
- Various versions of EAS-Modularis measuring capsules.

It can be retrofitted at any time without impairing the calibration.

Function

The battery-operated radio module **Supercom 587** scans the rotation of the modulator disc of the water meter, accumulates the rotation pulses and stores the consumption data in its internal memory. The scan guarantees a precise and correct detection of the backward and forward modulation indicator motion.

The radio module can be parameterized via the optical head and later read out by wireless M-Bus.

Stored Data

- Current accumulated volume and 15 monthly values.
- Set day and accumulated volume at set day.
- Water meter ID and radio module serial number.
- Medium: cold or warm water.
- Current time and date.
- Data transmission periods and transmission interval.
- One telegram: either the short (OMS) or the long telegram (Walk-by).
- AES-128 encryption for secure data transmission.
- Programmed accumulated volume, date of and total volume before last programming of accumulated volume for changes of the water meter.
- Manipulation protection: date of the last manipulation, accumulated duration of all manipulations in minutes and total number of manipulations.
- Number of counter resets.
- Operating hours of battery and commissioning date.
- Error code, firmware version.

Programming data

With the software Prog587 following parameters can be programmed:

- Water meter ID and medium: cold or warm water.
- Current date and time and set day.
- Initialisation of the totalizer, the set day value and of the 15 monthly values.
- Reset to delivery (sleeping) mode or set to operating mode.
- Data transmission periods and transmission interval and AES-128 encryption key.
- Choice of telegram: either short (OMS) or long telegram (Walk-by).
- Password for the secured access to the programming.

Technical Data

General

Permanent flow	MID: Q ₃ 2.5 m ³ /h – 6.3 m ³ /h
Nominal flow	EWG: Q _n 1.5m ³ /h – 3.5m ³ /h
Pulse value	1 l/Imp
Operating temperature	5 to 55°C
Storage temperature	-20 to 70°C

Housing

Protection class	IP65
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Wireless M-Bus radio communication Radio

Frequency	868.95 MHz
Communication	Unidirectional
Protocol	Wireless M-Bus
Encryption	AES-128
Transmission standard	EN 13757-4, mode T1
Broadcasting interval	Short telegram (OMS): > 120 s
	Long telegram (walk-by): > 120 s
Data transmission periods:	Short telegram (OMS): 24 hours a day, 7 days a week
	Long telegram (walk-by): < 12 hours a day, 7 days a week

Conformity



acc. to RED 2014/53/EU

Data Memory

FRAM	Real time storage
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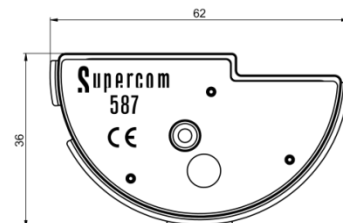
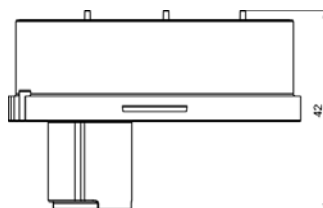
Electronic Data

Main supply	Lithium Metal Battery (≤ 1g) 3VDC
Service life	Maximum 12 + 1 years

Optical Interface

Protocol	EN 60870-5 (M-Bus)
Baud rate	2'400 or 4'800 Baud

Dimensional Drawing



Technical Support

For technical support, please contact your local Sontex agent or Sontex SA directly.

Hotline Sontex: sontex@sontex.ch, +41 32 488 30 04

The detailed declaration of conformity can be found on our homepage: www.sontex.ch

Technical modifications subject to change without notice

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