Supercom W2-L

LoRaWAN® Radio Module for Elster water meter

Application

The retrofittable radio module **Supercom W2-L** is suitable for Elster Messtechnik GmbH (Honeywell) water meters:

- S110 PICOFLUX EF single-jet.
- M140 MODULMETER MOF for exchange multi-jet capsule.

It can be retrofitted at any time without impairing the calibration. The bidirectional LoRa® radio allows the reading of the consumption data directly and safely (AES128 encoded) to your LoRaWAN network.

Function

The battery-operated radio module **Supercom W2-L** scans the rotation of the modulator disc of the water meter, accumulates the rotation pulses and stores the consumption data in his internal memory.
The scan guarantees a precise and correct detection of the backward and forward modulation indicator motion.
The radio module is equipped with a magnetic manipulation protection. If the radio module is removed and/or opened, the electronic manipulation protection triggers an error message.

Stored Data

- Medium: cold or warm water.
- Serial number (radio module address).
- Current time and date.
- Accumulated volume.
- Set day.
- Volume at set day.
- 15 monthly values.
- Operating hours of battery.
- Manipulation protection: date of the last manipulation and the accumulated duration of all manipulations in minutes.
- Number of counter resets.
- Error code.
- Firmware version.

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- Commissioning date.
- Accumulated volume and date at the last programming of volume.
- Accumulated volume before the last programming of volume.
- AES-128 encryption for secure data transmission.

Programming data

With the software Tools Superprog (OS Android or Windows) following parameters can be programmed:

- 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.
- AES-128 encryption key for secure data transmission.
- 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:	Qn 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

Conformity

CE acc. to RED 2014/53/EU

Radio

Method	LoRa®, bidirectional
Frequency	868 (863 MHz - 870 MHz)
Protocol	Radian, EN60870-5 (M-Bus)
Cycles	Standard every 2 hours
Range indoor	approx. 30 m, depending on building structure

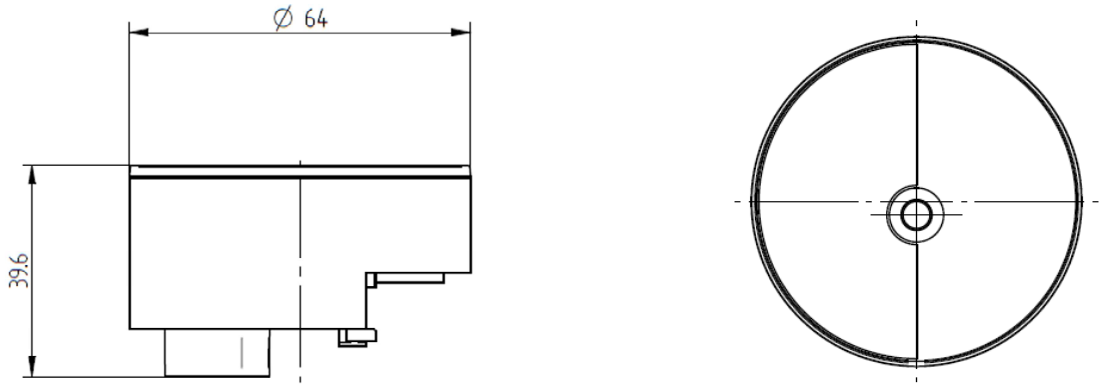
Data Memory

FRAM	Real time storage

Electronic Data

Main supply	Lithium Metal Battery (≤ 1g) 3VDC
Service life	Maximum 10 + 1 years

Dimensional Drawing



Technical Support
For technical support, please contact your local Sontex agent or Sontex SA directly.
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The detailed declaration of conformity can be found on our homepage: www.sontex.ch

Technical modifications subject to change without notice DS_SMW2L_V01_2008_en

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