

E-RM 30

Description

Radio module E-RM 30 scans the data from specially designed water meter, processes them, save to the memory and transmits data via radio signal. Data sent by radio interface can be read without entering the flat and even entering the building. E-RM 30 together with electronic heat cost allocators E-ITN 30 protect your privacy and save your time due to remote data reading.

Data reading

E-RM 30 rod antenna features a very good efficiency. Due to this high-quality signal it is possible to read data without entering the building even in case of installation in the shaft of multiple-storey building. Data reading can be made by billing company employee using mobile receiving unit. Data can be also read by central reading system permanently installed in the building if required. If radio heat cost allocators E-ITN 30 are also used, data are read simultaneously.

User control

Every user can control current value on analogue dial of water meter.

Protection against cheating

In contrast to the traditional water meter, radio module can E-RM 30 distinguish the direction of water flow - it is thus possible to detect manipulation with water meter (its turning). The radio module can be of course secured by conventional mechanical seal against its removal from the water meter. The radio module is equipped with an electronic seal that allows you to identify unauthorized manipulation and record the exact date. Information about such manipulation is transmitted in radio signal. Month consumptions for forward and back flow for past 12 months can be read from the radio module memory via infra-red interface. Water meters Apator Powogaz are extraordinarily protected against the effects of magnetic field.



Technical data

Working temperature	5 to 50 °C
Calendar functions	consumption for past 12 months (both for normal flow and back flow)
Data reading	radio and infra-red interface
Protection against cheating	back flow detection - module detects direction of water flow electronic seal records manipulation date when uninstalled possibility to mechanically seal radio module to water meter magnetic field detection
Data backup	daily backup of measured values including real time
Function	automatic
Dimension	70 x 43 x 69 mm
Power supply	lithium battery 3,0 V
Material	polycarbonate
Protection	IP 64
Mechanical and environmental class	B
Electromagnetic class	E1

Radio parameters

Operating frequency	868 MHz
Transmitting power	< 5 mW
Transmission length	8 ms
Transmission range	Up to 500 m (without entering the building, with additional panel antenna) <i>Rem.: It is necessary to consider that all metal parts of construction (switch rooms, armouring, lifts. .) can negatively affect the range of radio signal.</i>
Data coding	Yes
Battery life	10 + 1 year

Application

The radio module is intended to be used in an assembly with the undermentioned water meters Apator Powogaz in any position.

Type	cold water hot water	[mm]	JS-1,6	JS-2,5	JS-2,5-G1	JS-4
			JS90-1,6	JS90-2,5	JS90-2,5-G1	JS90-4
Nominal diameter			15		20	
Permanent flow rate Q ₃		[m ³ /h]	1,6	2,5		4
Overload flow rate Q ₄		[m ³ /h]	2	3,125		5
Minimum flow rate Q ₁ (horizontal / vertical installation)		[dm ³ /h]	16 / 32 20 / 40	25 / 50 31,25 / 62,5		40 / 80 50 / 100
Transitional flow rate Q ₂ (horizontal / vertical installation)		[dm ³ /h]	25,6 / 51,2 32 / 64	40 / 80 50 / 100		64 / 128 80 / 160
Maximum permissible error (Q ₂ až Q ₄)			±2 % ±3 %			
Max. working temperature		[°C]	30 90			
Max. working pressure			1,6 MPa (16 bar)			
Length		[mm]	110		130	
Conformity			MID, EN 14154, OIML R49			
Accuracy class		MID	R100 - H; R50 - V R80 - H; R40 - V			

Contact

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