Pietro Fiorentini

SSM-AQUO EV

SSM-AQUO EV ultrasonic water meters represent the next step in smart water resource management. Based on a static measuring principle with no mechanical moving parts subject to wear, they ensure **long-term accuracy and maximum operational reliability**. They can detect even the smallest flow rates, hidden leaks, and system anomalies — such as pipe bursts, zero consumption, or reverse flow — providing precise, continuous, and proactive consumption monitoring.

The integration of an **electrovalve** extends remote management capabilities, enabling automatic interventions in cases such as delinquent payments. It allows **controlled opening and closing** of the water flow, with the option to **activate customized limitation modes**.

All remote operations are supported by the built-in **NB-IoT communication module**, which ensures reliable, scalable connectivity suitable for any network infrastructure.

Residential users

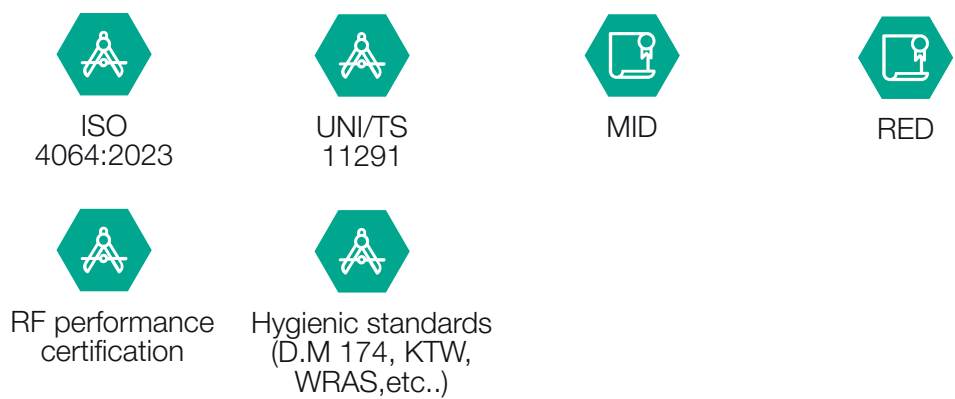| Features	Value	
Nominal diameter (inch)	DN15 (1/2")	
Lenght (mm)	110	
Threaded connections	¾ "G	
Operating range (R)	500	800 (Expected launch in 2027)
Maximum flow rate Q4 (m3/h)	3,125	3,125
Permanent flow rate Q3 – (m3/h)	2,5	2,5
Transient flow rate Q2 – (l/h)	8	5
Minimum flow rate Q1 (l/h)	5	3,135
Starting flow rate Q Start (l/h)	1	
Maximum operating pressure	Up to 16 bar	
Pressure drop	0,40 bar at Q3	
Ambient temperature	From -25 °C to 55 °C	
Water temperature range	From 0,1 °C to 30 °C | from 0,1 °C to 50 °C	
Approved for ambient temperatures	T30/ T50	
Environmental class - installation	B (protected environment) and O (exposed environment)	
MID accuracy class	2	
Environmental class	Mechanics M1 | Electromagnetics E1	
IP protection class	Compliant with IP68 (Complete immersion for up to 24h)	
Sensitivity to flow profile	U0-D0 (By OIML R49 and ISO 4064)	
Sensitivity to installation	All positions	
Power supply and operating time	Dual channel | Lithium batteries: 13-year battery life (non-replaceable)	
Remote communication interface	NB-IoT LTE multi-banda Cat NB2	
Local interface	• NFC according to ISO 15693 • ZVEI infrared optical port according to EN 62056-21	
Communication application protocol	NB-IoT compliant with DLMS/COSEM standard and proprietary telegram	
NOTE: The functional features indicated refer to standard models. Customized solutions can be provided based on specific requirements.		

Table 1 technical features

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Materials and Approvals

Part	Materials
Meter box	Brass - Eco-brass (Expected launch in 2027)

NOTE: The materials listed above refer to standard models. Different materials can be supplied based on specific requirements.

Table 2 Materials

The SSM-AQUO EV models are designed in compliance with OIML R49, ISO 4064:2023, and UNI/TS 11291 (where applicable).
The products are certified according to the European Directives 2014/32/EU (MID), 2014/53/EU (RED), and hygienic standards.

ISO 4064:2023

UNI/TS 11291

MID

RED

RF performance certification

Hygienic standards (D.M 174, KTW, WRAS,etc..)

SSM-AQUO EV Competitive advantages

Water and ambient temperature monitoring

Dual-channel power architecture with separate batteries and a service life of over 13 years

Advanced diagnostics

Excellent radio performance

Integrated shut-off valve

Two-way communication

Compact dimensions

Standard communication protocol worldwide