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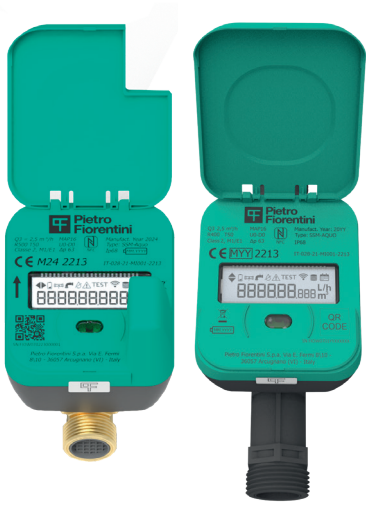
SSM-AQUO



SSM-AQUO ultrasonic water meters represent the next generation in smart water resource management. Leveraging a static measurement principle with no moving parts subject to wear, they deliver **consistent accuracy over time and outstanding operational reliability**. These meters can detect even the smallest flows, hidden leaks, and system anomalies—such as pipe bursts, zero consumption, or reverse flow—providing **precise, continuous, and proactive monitoring of water usage**. Remote operations are enabled by an integrated multi-communication module, ensuring maximum flexibility and supporting **NB-IoT, LoRaWAN, and wM-Bus** for a connectivity that is **reliable, scalable, and adaptable to any network requirement.**

Residential users

Model	Value					
Nominal diameter (inch)	DN15 (1/2")	DN20 (¾")	DN25 (1")	DN32 (1 ¼")	DN40 (1 ½")	DN50 (2")
Lenght (mm)	110-115-145-165	130-165-190	260	260	300	300
Threaded connections	¾ "G, 1"G, 7/8"G	1"G	1 ¼"G	1 ½"G	2"G	2 ½"G
Operating range (R)	Up to 500					
Maximum flow rate Q4 (m3/h)	3,125	5,0	7,875	12,5	20	31
Permanent flow rate Q3 – (m3/h)	2,5	4,0	6,3	10	16	25
Transient flow rate Q2 – (l/h)	8	12,5	20,2	32	51,2	80
Minimum flow rate Q1 (l/h)	5	8	12,6	20	31	50
Starting flow rate Q Start (l/h)	3	5	8	15	20	25
Maximum operating pressure	Up to 16 bar					
Pressure drop	0,63 bar at Q3		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 30days)					
Sensitivity to flow profile	U0-D0 (By OIML R49 and ISO 4064)					
Sensitivity to installation	All positions					
Power supply and operating time	Lithium batteries: 13-year battery life (non-replaceable)					
Remote communication interface	• LoRaWAN (Class A for data transmission, Class C for firmware upgrade function) + wM-Bus (T1/C1) • NB-IoT LTE multi-banda Cat NB2					
Local interface	• NFC according to ISO 15693 • ZVEI infrared optical port according to EN 62056-21 (According to the order placed)					
Communication application protocol	• LoRaWAN with proprietary telegram & wM-Bus with OMS-compliant telegram • 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 body	Brass - Eco-brass (Expected launch in 2027) – Composite (Available for DN20 L190mm)
Meter box	Polycarbonate plastic

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

Table 2 Materials

The SSM-AQUO 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

OIML R49:2013

OMS Certified Product

LoRaWAN Certified Product

RF performance certification

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

SSM-AQUO Competitive advantages

- Water and ambient temperature monitoring
- Advanced diagnostics
- Compact dimensions
- Excellent radio performance
- Two-way communication
- Standard communication protocol worldwide

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