

SSM-iCON

The **SSM-iCON smart meter** by Pietro Fiorentini incorporates the latest ultrasonic technology to measure gases plus a variety of network connectivity options. It is equipped with a valve which can be triggered by remote or locally upon specific events, as the exceeding of a temperature threshold. Suitable for use with natural gas, biomethane and hydrogen blends (up to 20%), this device is used for residential applications as well as light commercial application on low pressure gas distribution networks.



Residential users



Commercial users

Features	Values
Measurement Range (Qmin - Qmax)	from 0.040 to 6 m ³ /h from 1.4 to 212 cfh
Minimum Flow rate (Qstart)	0.01 m ³ /h 0.35 cfh
Maximum Operating Pressure*	up to 50 kPa up to 500 mbar
Pressure drop	≤ 0.2 kPa @Qmax ≤ 2 mbar @Qmax
Ambient temperature*	from -25 °C to 55 °C from -13 °F to 131 °F
Gas temperature range*	from -25 °C to 55 °C from -13 °F to 131 °F
Accuracy	Class 1.5
Ingress protection	Compliant to IP55 (IP66 on request)
Metrological power supplies and operating lifetime	Lithium batteries 15 years for standard version (non-replaceable). 20 years for extended life version (non-replaceable)
Communication power supplies and operating lifetime	Lithium batteries Up to 20 years for communication battery (replaceable) depending on remote communication interface
Remote communication interface	NB-IoT, GPRS (2G), RF WM-Bus @169 MHz
Communication protocols	DLMS compliant, UNI/TS 11291 compliant (others on request)
Measuring Gas	Natural Gas (2 nd family - group H, L and E - according to EN 437)
High Ambient Temperature approved	T
ATEX classification	II 3G Ex ic IIB T3 Gc
Gas volume compensation	Temperature compensated (TC) and non temperature compensated (NTC) options available
Nominal dimensions	Connection distance – 110 mm Width 206 mm; Height 130.4 mm; Depth 112.2 mm for standard version (120.2 mm for extended life version) Connection distance – 4.3 inches Width 8.1 inches; Height 5.1 inches; Depth 4.4 inches (4.7 inches for extended life version)
Connections	1" 1/4 ISO 228, 1" ISO 228, 7/8" ISO 228

(*) REMARK: Different functional features and/or extended temperature ranges available on request. Stated temperature ranges are the maximum for which the equipment's full performance, including accuracy, are fulfilled. Standard product may have a narrower range.

Table 1 Features

Materials and Approvals

Part	Material
Body	Zinc-coated pressed steel plate
Electronic enclosure	Plastic polycarbonate

REMARK: The materials indicated above refer to the standard models. Different materials can be provided according to specific needs.

Table 2 Materials

The SSM-iCON is designed to meet OIML R137, EN 14236 and UNI/TS 11291. The product is certified according to European Directives 2014/32/EU (MID), 2014/34/EU (ATEX) and 2014/53/EU (RED).



OIML R137



EN 14236



UNI/TS 11291



ATEX



MID



RED

SSM-iCON competitive advantages



Temperature monitoring sensor



Integrated shut off valve



Open communication protocol



15 years metrological battery



Up to 20 years communication battery life depending on radio interface installed



Extended life metrological battery option (20 years)



Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request