MESURA METERING

A Cavagna Group Company

PRODIGI

Ultrasonic Smart Gas Meter

A Game Changer for LPG & Natural Gas Marketers

- Monitors consumption remotely
- Provides a familiar customer interface similar to other utilities
- Helps to optimize gas deliveries
- Adds control to overall storage efficiency

Accuracy & Durability

Ultrasonic Flow Sensor

The Prodigi uses an innovative high-performance ultrasonic sensor by Panasonic, designed to accurately measure the volume of LPG/Natural Gas. By using a static measurement technology, without moving mechanical components that wear out over time, it guarantees:

- minimum pressure loss
- high level of accuracy

Stainless Steel Body

The Prodigi is a durable and safe solution. Its IP65 protection grade and the corrosion-resistant, fully welded, stainless steel casing ensure it can withstand the external agents.

Step-motor Valve

Thanks to the Prodigi's step-motor valve by Panasonic, located after the gas inlet, it is possible to monitor customers' consumption and, if necessary, even shut off the gas supply remotely. That eliminates the need to physically send a service technician to the location in order to manually shut off the gas flow. Remote gas metering enables gas companies to better plan their internal operations and manage interventions in an optimised way, allowing their employees to work more efficiently and safely.

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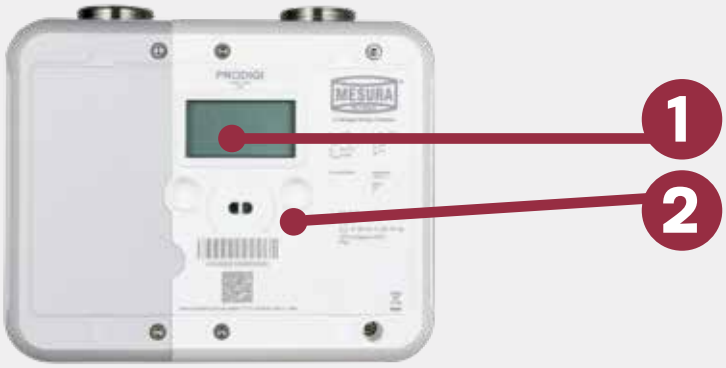
Ultrasonic Gas Meter

Local User Interface



1 LCD Display screen with the volume displayed in cubic feet or meters to 3 decimals and with specific icons*.

*The list of icons is available on request

2 2 capacitive buttons to navigate through recorded values.
Right Button: To scroll through screens
Left Button: To activate specific functions

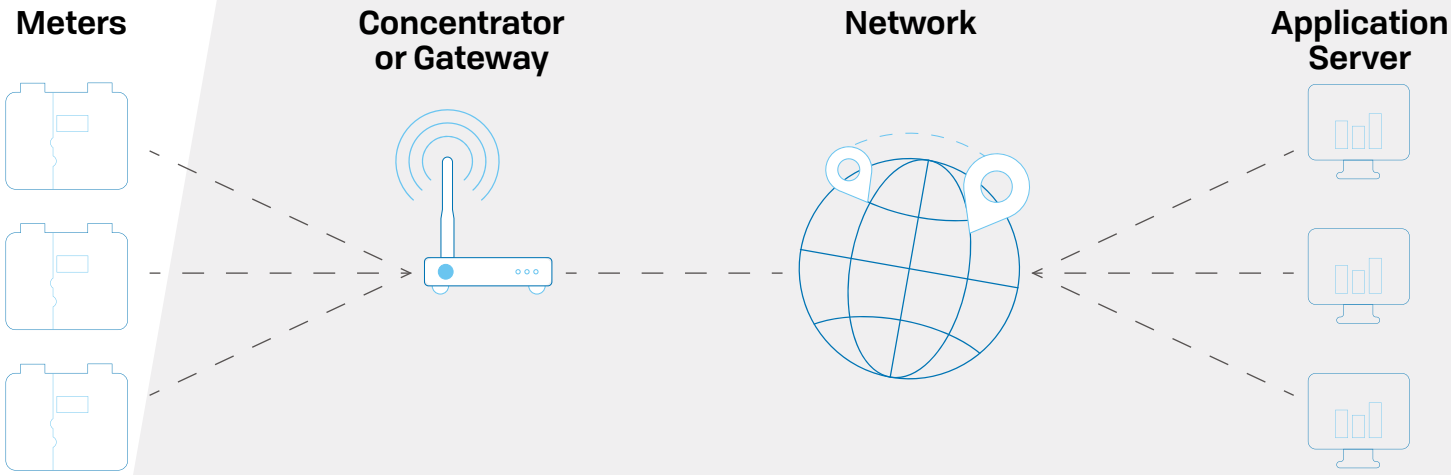
Communication

The Prodigi does not simply measure gas flow: its great flexibility and versatility are also expressed by its communication capabilities. Prodigi communicates data to the gas company, allowing to maximise its resources, and guarantee a reliable, accurate and efficient service.

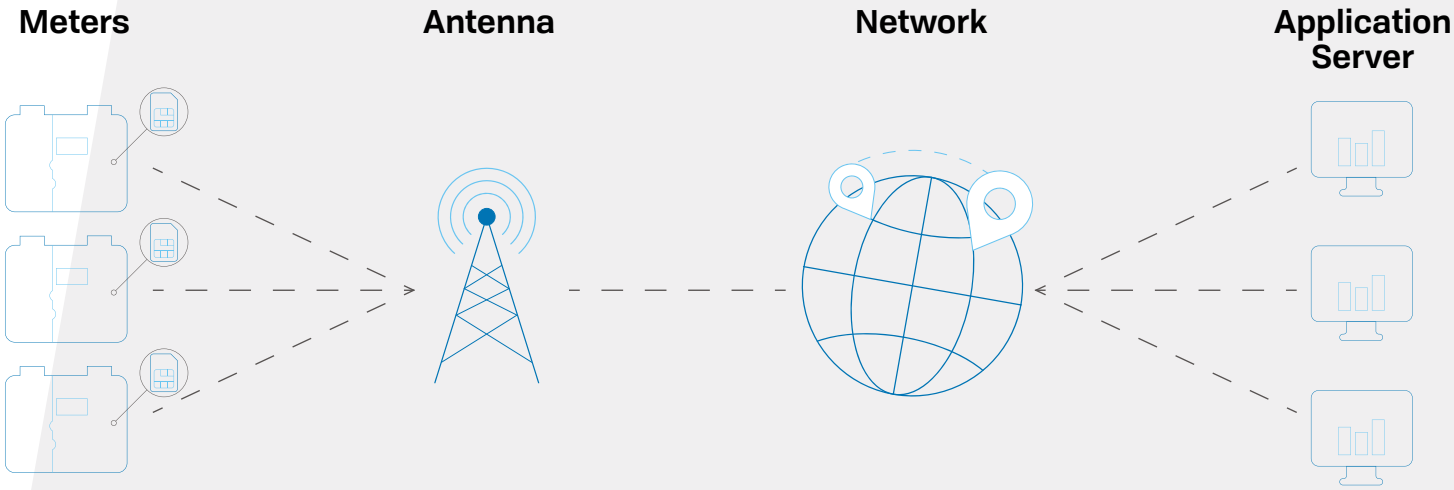
How does it work?

1) Gas Measurement. The gas flow is measured as it passes through the ultrasonic sensor.
2) Values encryption. The measured values are encrypted and decrypted by standard communication protocol through Device Language Message Specification (DLMS).
3) Data transmission. The measurement signals are then stored until the Prodigi communicates the values to OTUS (Cavagna Group's asset management platform) using RF 169 MHz, GPRS 2G, LoRaWAN, NB-IoT or LTE CAT-M Communication. This data transmission happens electronically, without the need of someone physically reading the meter.

RF 169 MHz / LoRaWAN



GPRS 2G / LTE CAT-M / NB-IoT



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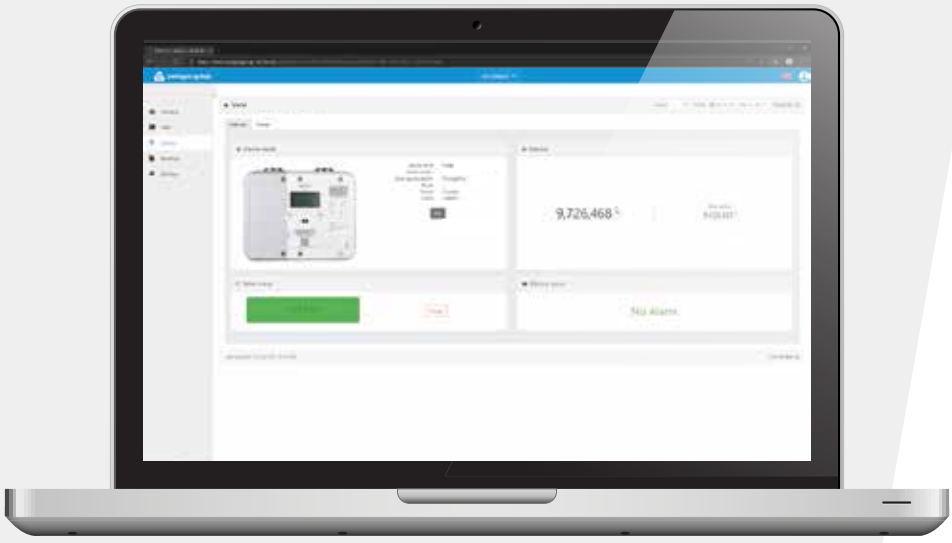
Otus

Powered by webvision

OTUS acts as a collection centre for all of the information that Prodigi is able to acquire and transmits in an encrypted form.
OTUS is a cloud based platform that allows you to:

- Remotely close the shut-off valve
- Automatically calculate the monthly consumption of each meter
- Collect historical data of gas consumption
- Create personalized reports and download them in either PDF or CSV format
- Perform an analysis of historical consumption trends
- Place the device in your own map

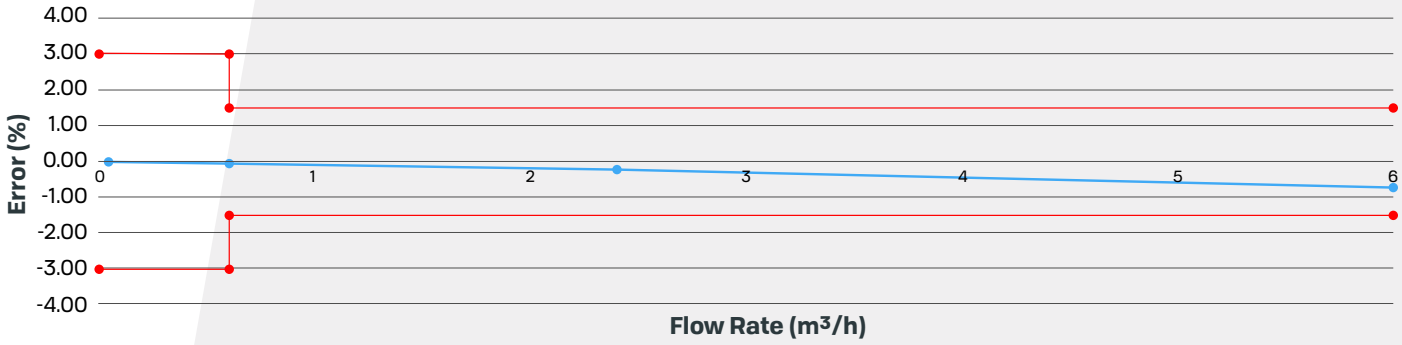


Easy remote monitoring thanks to the Cavagna Group Digital Platform

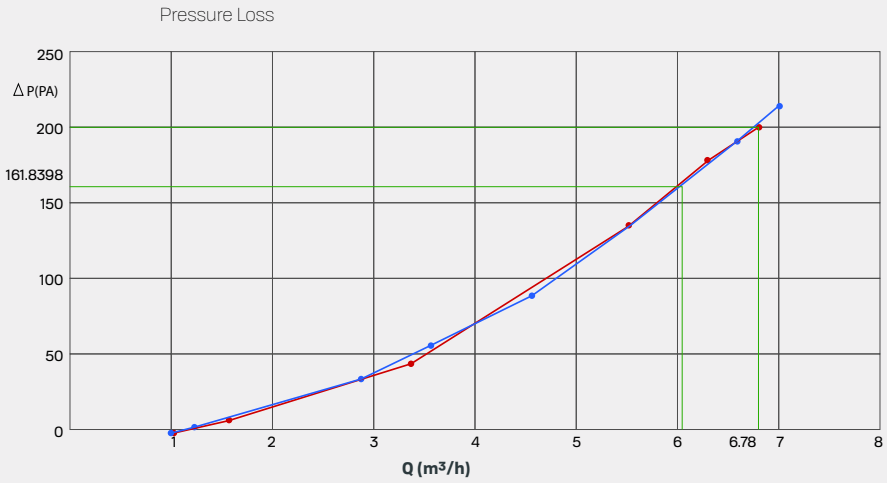
Ultrasonic Gas Meter

Performance Ultrasonic Smart Meter

Accuracy Curve



Pressure Loss Curve



Ultrasonic Gas Meter

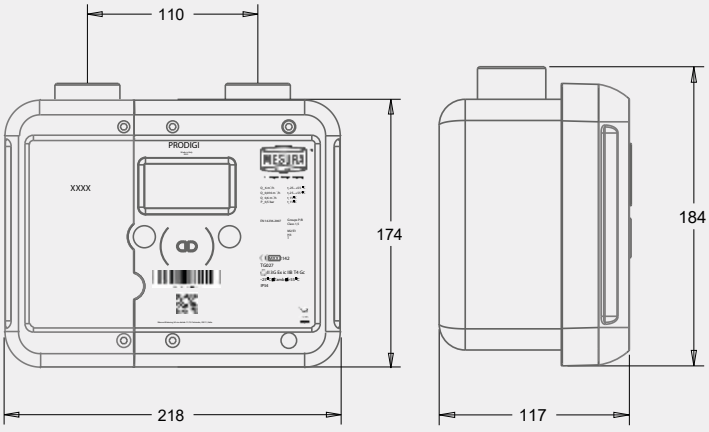
Technical Features

Accuracy Class	1,5	175
Capacity	0,016-6 m3/h (G1.6-G2.5-G4)	
Measuring Gas	LPG/Propane/Butane/Natural Gas	LPG/Propane
Maximum Operating Pressure	0,3 bar (LPG/Propane/Butane) - 0,5bar (Natural Gas)	4.35 psi (30 KPa)
Working Temperature	-25°C ÷ +55°C	13° F ÷ +125° F
Temperature at base conditions	15°C	60° F
Load Loss	≤ 2 mbar	≤ 0.03 PSI - ≤ 2 mbar (at 240 ft³/h)
Humidity	95%	
Connection threads	1"1/4 ISO 228**	20LT
Casing Material	Stainless Steel	
Protection Grade	IP65	NEMA-4
Local Interface	Infrared optical door ZVEI in accordance to norm EN 62056-21	
Communication Protocol	In accordance with UNI TS 11291-11/-12 DLMS/COSEM	available in UDP/TPC
Certification	ATEX - Zone 2 II 3G Ex ic IIB T4 Gc	UL Approved - Flammable Gas Meter
Batteries	1x Metrology battery 1x Communication battery	

*According to the working conditions

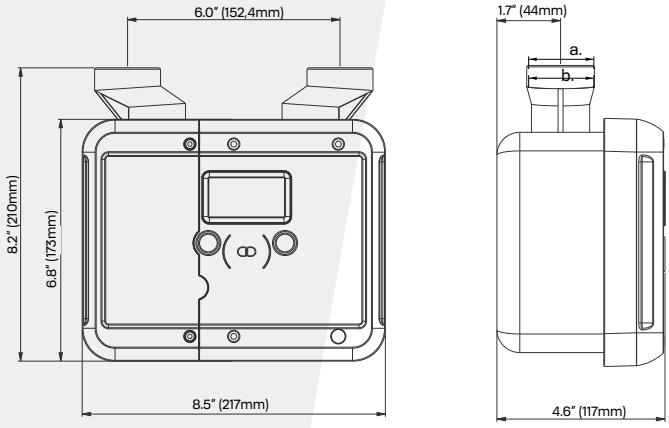
**Connectors available for 3/4" and 7/8"

Overall Dimensions



Weight: 2 kg

Other versions upon request



Threads Fittings: (a) USA version (LTE CAT-M/NB-IoT): 20LT
(b) UK version: 1"BSP

4MM1842E – Rev.8.1 ENG – 04/25

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Product Codes

Name	Gas Measured	Communication Protocol	Meter Class	Product Code
PRODIGI RF16	Natural Gas	RF 169 MHz (only for Italian market)	G1.6	99F3900004
PRODIGI RF25			G2.5	99F3900005
PRODIGI RF40			G4	99F3900006
PRODIGI GPRS		GPRS 2G	Extended Range*	99F3900007
PRODIGI GPRS16			G1.6	99F3900008
PRODIGI GPRS25			G2.5	99F3900009
PRODIGI GPRS40			G4	99F3900010
PRODIGI NBIOT		NB-IoT	Extended Range*	99F3900011
PRODIGI NBIOT16			G1.6	99F3900013
PRODIGI NBIOT25			G2.5	99F3900015
PRODIGI NBIOT40			G4	99F3900017
PRODIGI LORA1		LoRaWAN 868MHz- 915MHz	Extended Range*	99F3900012
PRODIGI LORA16			G1.6	99F3900014
PRODIGI LORA25			G2.5	99F3900016
PRODIGI LORA40			G4	99F3900018
PRODIGI RF GPL	LPG Propane Butane	RF 169MHz	Extended Range*	99F3900019
PRODIGI GPRS GPL		GPRS 2G	Extended Range*	99F3900003
PRODIGI LORA1 GPL		LoRaWAN 868MHz-915MHz	Extended Range*	99F3900020
PRODIGI NBIOT GPL		NB-IoT	Extended Range*	99F3900021
PRODIGI US1 LoRaWAN	LPG Propane	LoRaWAN 868MHz-915MHz	Extended Range*	99F3900024
PRODIGI US2 NB-IoT/ LTE CAT-M		NB-IoT / LTE CAT-M	Extended Range*	99F3900023
PRODIGI UK1	LPG	LoRaWAN 868MHz-915MHz	Extended Range*	99F3900032
PRODIGI UK2		NB-IoT	Extended Range*	99F3900034
PRODIGI UK3		GPRS 2G	Extended Range*	99F3900030

Extended Range: flow rate from 0.016-6 m^3/h

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