



RF1 sV G

Residential Smart Gas Meter

Itron's gas smart meter platform has been built upon the proven design of standardized digital communication interface between the main board and the communication board to ensure safe infrastructure investments through future upgradeability.

KEY BENEFITS

- » Future proof modular concept
- » Plug 'n' Play Installation; No special infrastructure needed
- » Field swappable battery
- » Remote firmware upgrade
- » Based on GPRS communication
- » Easy operation and maintenance through advanced 2 push button human machine interface.

METER DESCRIPTION

The meter consists of a gas containing steel case, enclosing a diaphragm measuring unit and a high precision shut off valve. The measuring unit is the latest version and field proven for many years and in many different environments.

The shut off valve is designed to reduce the time and energy involved in operation in a way that the effect on battery life is minimized. It consists of an integrated high tech electronic and a mechanical unit.

The mechanical unit is connected to the external electronics unit through the steel case, whilst still enabling the meter to meet the high ambient temperature requirement.

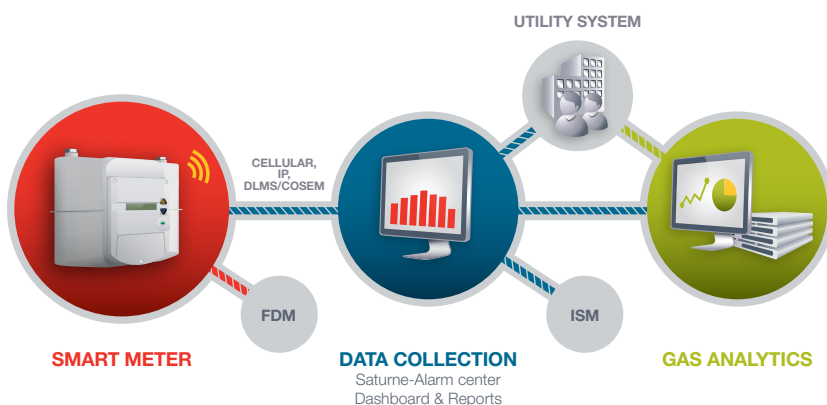
The electronic unit includes interchangeable batteries and communication modules located under a sealed cover. It uses a proven optical detection mechanism in order to provide accurate, low power and bi-directional functionality for measurement of gas.

STANDARDS & COMPLIANCE

The meter is compliant with the following standards and norms:

- » MID approved
- » ISO 9001 certified
- » ATEX approved
- » R&TTE approved
- » DLMS/COSEM certified

SOLUTION ARCHITECTURE



DATALOGGING

- » Daily log consisting of data referred to UNI TS11291-6
- » Dynamic multi-tariff calculation
- » At end of billing period, the billing data is recorded (256 entries)
- » Daily logging performed periodically on Gas-Hour each day (512 entries)
- » The event log stores event information with volume and time (2048 entries)
- » Parameter change log stores the time and old value of changed parameter, together with Volume and alarm state (4096 entries)

COMMUNICATION

- » TCP/IP communication
- » DLMS/COSEM protocol
- » COSEM high level security
- » Innovative "PLUSH" communication mode available
 - Communication initiated by the meter
 - Data Objects and schedules defined by the system
- » Daily scheduled readings
- » Automatic error messages
- » On demand status reads

METERING AND ALARMS

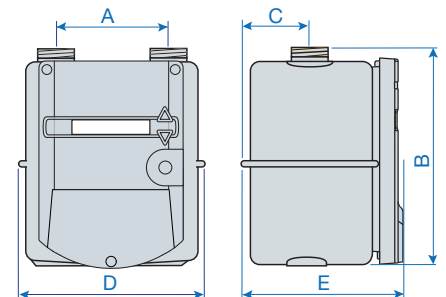
- » Remote Valve operation
- » Metrological and functional parts of the meter protected with separate seals
- » Alarms:
 - Open cover alarm
 - Metrological tampering alarm
 - Battery low (threshold configurable)
 - Backflow alarm

Technical Specifications

Parameter	Value
Gas type	Natural gas, air, propane, butane, nitrogen and all non-corrosive gases
Cyclic Volume	2 dm ³
Measuring Range	G6 Qmin: 0.06 m ³ /h Qmax: 10 m ³ /h G4 Qmin: 0.04 m ³ /h Qmax: 6 m ³ /h
Max. operating pressure	0.5 bar (0.1 bar for HTL version) Valve operation up to 0.15 bar
Temperature Range	Operating: -25°C to +55°C Storage: -25°C to +70°C (> 55°C for up to 8 hours)
ATEX approval	Zone 2 : Ex II 3G Ex ic IIA T3 Gc
Operating humidity	<= 93%, between -25°C and +40°C, <= 90%, between +40°C and +55°C
Colour	Light grey RAL 7035
Display	LCD with 9 digits
Service Interface	IR service interface (EN62056-21)
Battery	Lithium batteries with an average lifetime of minimum 7.5 years under reference conditions
Standards / Directives	Directive 2004/22/EC (MID), Directive 1999/5/EC (RTTE), Directive 2004/108/EC (EMC) Conformity with EN1359:1998-A1:2006
IP Protection	IP54 minimum protection level (according to EN60529)

Dimensions and Weight

Meter Type	Size mm					Weight kg
	A	B	C	D	E	
152.4mm (6")	152.4	279	83	233	194	3.00
250 mm	250	267	71	325	194	3.20



Connection threads

Type	152.4 mm (6")	250 mm
BS746	1 1/4" *	
ISO 228-1		G1 1/4" A

*Other meter types and versions are available. Please contact us for further inquiries.

Join us in creating a more **resourceful world**.
To learn more visit **itron.com**

While Itron strives to make the content of its marketing materials as timely and accurate as possible, Itron makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of, and expressly disclaims liability for errors and omissions in, such materials. No warranty of any kind, implied, expressed, or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability, and fitness for a particular purpose, is given with respect to the content of these marketing materials. © Copyright 2014 Itron. All rights reserved. **GA-RF1SVG-02-EN-10-14**

ITRON GmbH

Hardeckstraße 2
D-76185 Karlsruhe
Germany

Phone: +49-721 5981 0

Fax: +49-721 5981 189