



GW*i*
George Wilson Industries

metrix
GRUPA APATOR

Domestic Smart Gas Meter

Key Features

- High tech, state of the art design with high quality components
- Proven and reliable diaphragm gas meter with high accuracy multipoint calibration throughout the flow range
- For use with fuel gases of the 1st, 2nd & 3rd families according to EN 437:1993
- MID approval in accordance with EN 1359
- Volume conversion to base condition in accordance with EN 12405
- Design in accordance with SMETS 2 and GBCS with the versatility to adapt to emerging smart metering markets across Europe
- ATEX (EN 60079) approval (Zone 2 3G Ex ic IIA T3 Gc)
- IP65 ingress protection rating (IEC 60529)
- Very low pressure drop using ball valve technology
- Available with either front viewing (FVI) or top viewing (TVI) index configuration (for semi-concealed installations)
- Interoperability with smart electricity meters and in-home display units (IHD's)
- Optical port located on front of index (IEC 1107 and IEC 62056-21 compliant)
- Low power, solid state GWi Hall Effect sensor (patent pending)
- Calculated 15 year battery life (dependent on profile)
- MBus 868MHz and ZigBee 2.4GHz communications modules available
- FOTA upgradeable (Firmware Over The Air upgradeable)
- Real time clock accuracy: $\pm 0.5s/day$
- Electrical safety (EN 61010), RED approval (EN 300) and SIL2 reliability & functional safety (IEC 61508)

Technical Data

Meter Variant		UG G4		2UG G4	2UG G6
Cyclic Volume (dm ³)		1.2	2.2	2.2	
Flow Range (m ³ /h)	Qmax	6.0			10.0
	Qmin	0.04			0.06
	Qnorm	4.0			6.0
Max working pressure (mbar)		75*			
Starting flow rate (dm ³ /h)	Qstart	5.0			
Connection Centres		6" (152.4 mm)			
Gas Connections (BS 746)		1"			
Weight (kg)		3.4 kg			
Dimensions (H x W x D) (mm)		262 x 235 x 176			
Max Index Reading (m ³)		999999.999			
Operating Temperature (°C)		-25 to +55			
Storage Temperature (°C)		-25 to +60			
*up to 500mbar on request					



Smart features

- Approved firmware platforms for use in Europe & the United Kingdom
- Register and calculation of the following: Volume at measuring condition [m³], Corrected volume [m³], Volume at base condition [m³], Energy [kWh], Instantaneous flow rate [m³/h], Maximum demand (peak flow)
- 2 channel profile recorder with independently configurable data capture
 - Configurable intervals & capacity
 - Channel 1 designed for general energy measurement
 - Channel 2 designed for billing profile
- Configurable time-of-use tariffs
- Configurable automatic and manual scroll sequence windows
- Optional prepayment (PPMID) feature
- Data logger with five independent FIFO buffers (up to 50 events), including: General, Fault Conditions/Tampers, Security, Communications

Communications Modules

- ZigBee 2.4 Ghz SMETS 2
- Wireless MBUS 868 Mhz OMS (Mode 5 encryption)
- Wireless MBUS 868 Mhz SMR 5.0 (Mode 9 encryption)
- Additional modules available on request

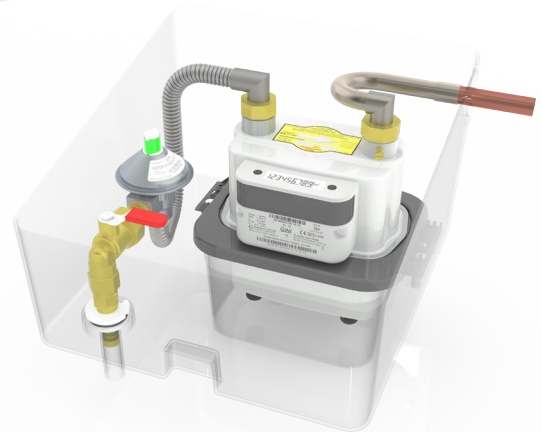
Additional Features

- Single removable front cover with separate battery and communication compartments
- Five layer security system comprising both physical and electronic tamper detection of compartment cover removal, MID seal removal, index removal, external magnetic fields
- Integral ball valve to remotely connect/disconnect flow
 - Disconnection by remote command, configurable tamper or battery failure
 - Safe re-connection with manual local confirmation
- 2 button user interface
- Universal comms module interface allowing interchangeability & in-service replacement
- Primary Battery: 3.6V Lithium Thionyl-Chloride (can be replaced in-service)
- HLC Backup Battery: 30 days capacity to support critical functions such as measurement





Standard Installation
(Front Viewing Index)



Semi-Concealed Installation
(Top Viewing Index)



George Wilson Industries Limited
 Aldermans Green Industrial Estate
 Barlow Road
 Coventry
 CV2 2LD
 United Kingdom
 T: +44 (0) 2476 709 050
 F: +44 (0) 2476 647 970
 E: smart@gwi-ltd.co.uk
 W: www.gwi-ltd.co.uk



Apator Metrix S.A.
 Ul. Grunwaldzka 14
 PL 83-110
 Tczew
 Poland
 T: +48 (58) 530 92 00
 F: +48 (58) 530 93 00
 E: metrix@apator.com
 W: www.apator.com

