



# Smart Gas Meter



## Main Features

- Flexible future proof**
- Available as either Standard or Top Viewing Index (TVI)
  - Interoperability with Smart Electricity Meters and In Home Display Units (IHDU)
  - Low power, electronic solid state, GWi hall effect sensor (Patent pending )
  - High tech / state of the art electronic design with high quality components
  - In service replacement of communications
  - Remotely upgradeable firmware
  - Design in accordance to smart meter specifications

## Technical Data

- Meter Specification**
- Connection Centres: 152.4mm
  - Capacity Qmin: 0.12 m<sup>3</sup>/h
  - Capacity Qmax: 6 m<sup>3</sup>/h
  - Cyclic Volume: 1.2/2.0 dm<sup>3</sup>
  - Meter specification
    - Weight: 2,7 kg, Dimensions: 281 (H) x 235 (W) x 172 (D)
  - Index specification
    - Weight 0,270kg, Dimensions: 94 (H) x 142 (W) x 45 (D)
  - Powdercoat RAL 9010
  - Stainless steel band

- Index Specification**
- Battery: 1 x 3.6V/8Ah, Lithium Thyonyl-Chloride, C type
  - Min. 15 years battery life
  - Backup battery (30 days)
  - Real time battery life monitoring
  - Operating temperature range: -20°C to +55°C
  - Real time clock accuracy: ±0.5s/day
  - Water and dust protection IP54 (IEC 60529)
  - Individual battery and communication compartments
  - 2 button user interface:
    - Menu functions
    - Valve control
  - Large and clear view enabling LCD display with backlight illumination
  - Integral valve for closing and opening of the gas flow:
    - Closing: remote command, configurable tamper and battery failure
    - Safe reopening: through end user manual confirmation by pressing valve control button
  - MID approved, ATEX approved category 3

- Measurement**
- Proven and reliable diaphragm gas meter
  - High accuracy 3 point calibration throughout the flow range (Qmin, 0.2Qmax, Qmax)
  - Register and calculation of the:
    - Volume at measuring condition [m<sup>3</sup>]
    - Corrected volume [m<sup>3</sup>]
    - Volume at base condition [m<sup>3</sup>]
    - Energy [kWh]
    - Instantaneous flow rate [m<sup>3</sup>/h]
    - Maximum demand (peak flow)
  - Measurements displayed to 1 litre resolution (0.001 m<sup>3</sup>)

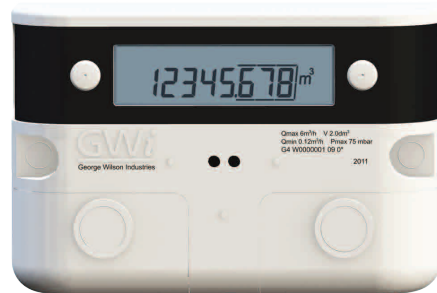
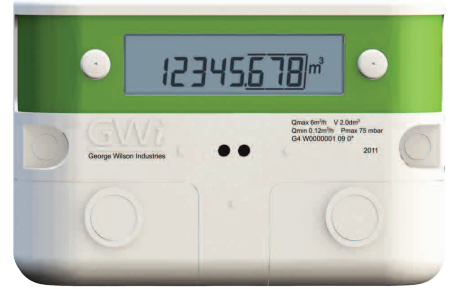
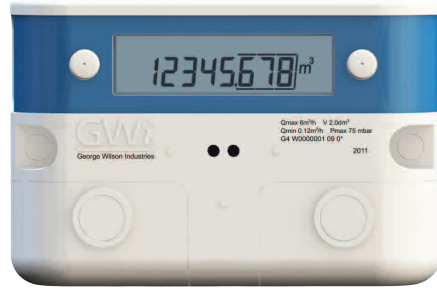
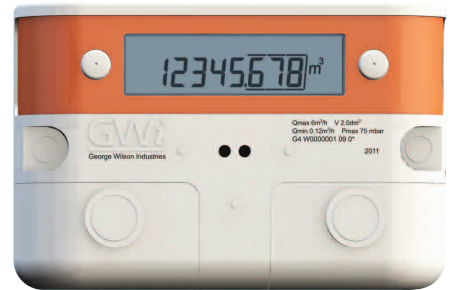
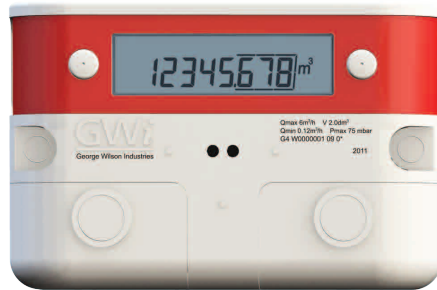
## Smart Features

- Data management**
- Configurable up to 48 time-of-use tariffs
  - Profile recorder
    - 2 channels with independently configurable data capture
    - Channel 1:
      - Designed for general energy measurement
      - Configurable intervals (6,10,15,20,30 and 60 minutes)
      - Capacity: 13 months/half hour/1 register
    - Channel 2:
      - Designed for billing profile
      - Configurable intervals (day, week, month or specific day)
      - Capacity: 13 months/monthly/consumption and tariff registers
  - Data logger with five independent FIFO buffers (up to 50 events)
    - General (informational, clocks, schedules...)
    - Fault (general system faults)
    - Security (password activities)
    - Communications (session statistics)
    - Valve control (opening, closing...)
  - Configurable AUTO and MANUAL scroll sequence with up to 16 entries
  - Firmware upgrade through RF communication channel
  - Optional prepayment feature

- Tamper protection**
- 30 day backup battery (to support logging and clock maintenance)
  - Supervision of the battery capacity and generating alarms in case of crossing low or failure level capacity
  - Communication and battery tamper protection through compact housing design
  - Valve closure upon tamper detection
  - Detection of the external magnetic field
  - Data logger and display alarms

- Communication**
- Optical interface according to the IEC 62056-21 (C mode) for reading and parameterization of the smart gas index
  - User friendly software package for reading, calibrating and parametrizing for PC and Hand Held Units
  - Communication module – universal interface for various connections Wireless MBus, ZigBee RF
  - Able to communicate with HDU if required
  - Flexible communications platform





Customer ID colour available  
Standard colour: Grey



George Wilson Industries

George Wilson Industries Limited  
BI Gas Division  
Aldermans Green Industrial Estate  
Barlow Road  
Coventry  
CV2 2LD  
T: +44 (0) 2476 603336  
F: +44 (0) 2476 603128  
E: smart@gwi-ltd.co.uk  
W: www.bi-gas.com

### SMS Group

SMS Metering Limited (design)  
SMS Manufacturing Limited (manufacturing)  
15 Campbell Road  
Croydon  
Surrey, CR0 2SQ  
T: 0845 604 7244  
E: sales@smsmetering.co.uk  
W: www.smsmetering.co.uk



FS 00657



EMS 86012