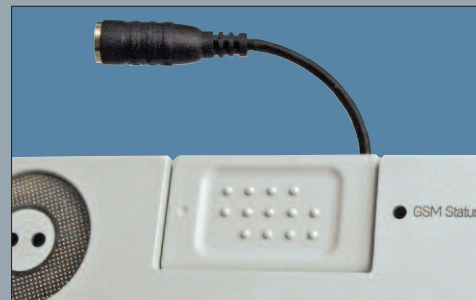










P2G

Data logger with internal GSM modem and safety isolation for use with gas and water meters



P2G integrates a data logger, a GSM modem and safety isolation in a single unit. The internal GSM modem assures reliable data communication as a part of an AMR or an M&T system for industrial electricity, gas and water metering. **P2G** belongs to a new generation of professional communicators based on integrated intelligent i2-GSM™ modem technology developed by Iskraemeco. The **P2G** communicator is ATEX approved and manufactured in compliance with BS EN 60079 and ISO 9001.



-  2-channel pulse input & output
-  Data logger
-  Event Log
-  Low power AMR by SMS
-  Internal clock
-  Local reading/programming
-  Protection level
-  Intrinsic safety certified

- AMR for electricity, gas, water and other pulse emitting meters
- Integrated GSM modem for remote communication
- Low power operation for extended battery life
- Intrinsically safe isolation
- Profile logging of up to two input channels
- Physical tamper detection and alarming
- Local programming and reading via IR interface using HHU
- Configurable input-to-output port mapping (IGE/GM/7)
- Ambient temperature monitoring and logging
- Compact weatherproof housing for wall or panel mounting

FUNCTIONAL AND TECHNICAL FEATURES

Data logger

P2G counts input pulses and stores the accumulated totals in on-board non-volatile memory.

- Configurable logging interval of 5, 15, 30, 60 minutes or 24 hours
- Typical storage capacity exceeds 70 days of 30-minute data per channel (if 2 bytes per data)
- Ambient temperature logging
- Integrated Real-Time Clock (RTC) providing up to 5 configurable schedules defining when and which captured data is transmitted

Inputs

- Up to two intrinsically safe pulse inputs for direct interface with up to two utility meters or pulse correctors
- Reed switch or solid state pulse type inputs are accepted
- Pulse counting on the inputs at a maximum frequency of 10 Hz
- Either input can be associated with one of the isolated pulse output ports
- One input can be mapped to all pulse output ports (IGE/GM/7)
- Tamper inputs associated with pulse inputs

Outputs

- Up to two isolated voltage-free optocoupler outputs
- Each output is capable of dissipating up to 130 mW

Event log

Several operational events including network performance, SMS message transactions, battery status and tampering are logged continually. Automatic alarm or error messages via SMS can be configured.

Infrared optical communication port (IEC 62056-21)

- Local data readout of the historic records for each input channel
- Local configuration of the unit during installation or maintenance

AMR communication interface

- Integrated GSM quad-band 900/1800 and 950/1900 MHz modem
- High performance internal antenna with external antenna option

- Data transfer with SMS messages according to SMP (SMS Meter Protocol)
- Scheduled data transmission with configurable start time and period
- On-demand data transmission
- Remote configuration

Note: use 3 V SIM cards only!

Power supply

- Factory supplied 3.9 V lithium battery, size D
- Estimated battery life exceeds 5 years assuming one SMS transmission per day
- Easy replacement of the battery on site

Easy installation & commissioning

- Fixing to the wall or any other base by screws; P2G is not position dependent
- Field initialisation and programming of the unit using HHU or a laptop

Enclosure


- Made of highly durable polycarbonate
- Weatherproof IP66 protection level against dust and water penetration
- Rectangular recess for a slip-on external antenna coupler
- Supplied with input and output cables according to the customer's specifications

Accessories

- MeterView software (latest release 4.5.1) for Microsoft WIN 2000/WIN Server 2003/XP/Vista/7
- IR optical probe with a DB9 or USB connector
- External antenna with a coupler

Protection and safety

- A sealed unit cover preventing access to the fixing screws
- Intrinsic safety certificates according to ATEX Directive:

SIRA 06 ATEX 2144X
 **II 1 G EEx ia IIC T4**
 $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

DEVICE TYPE DESIGNATION

P2G-K17V03100-IS

- P2** – Communicator & Data Logger
- G** – Explosive environment – gas meters
- K17** – IR + GSM communication modules
- V03100** – 2 pulse & 2 tamper inputs / 2 optocoupler outputs
- IS** – Intrinsically safe as a whole (Zone 0)

P2G TYPES AVAILABLE

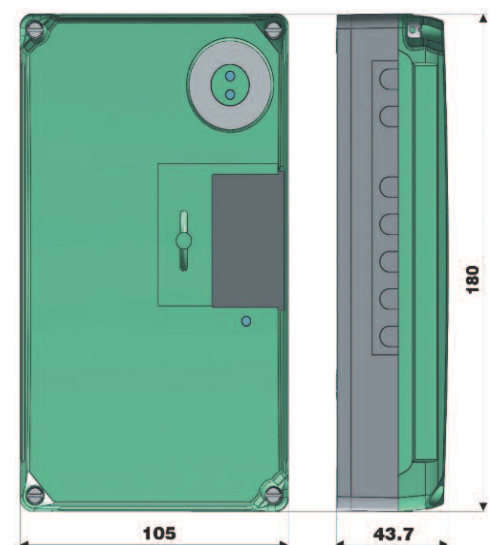
P2G-K17V03100-IS

The unit is intrinsically safe as a whole and may be installed in the hazardous area (Zone 0).

TECHNICAL DATA

| | |
|------------------------------------|--|
| Number of pulse inputs..... | 2 |
| Switch on resistance | < 10 Ohms |
| Switch off resistance..... | > 10 ⁶ Ohms |
| Number of optocoupler outputs..... | 2 |
| Output pulse width..... | 5 ms |
| Optocoupler output rating | 130 mW |
| Mutual channel isolation | 2500 V _{dc} |
| RTC accuracy | ±10 ppm with GSM network synchronisation |
| EMC | EN 61000-6-2 |
| RF EM field..... | 30 V/m (0.1 – 1 GHz) |
| Operating temp. range | -20°C ... +60°C |
| Storage temp. range | -25°C ... +75°C |
| Ambient humidity | <75% annual mean |
| Dimensions (W x H x D) | 180 x 105 x 44 mm |
| Mass..... | approx. 0.40 kg |

OVERALL DIMENSIONS (mm)



Owing to periodical improvements of our products the supplied products can differ in some details from the data stated in the prospectus material.

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