

# **Energy Measurement and Management**

# **P2G** Data Logger Instructions for use

Intrinsically Safe Logger & Communicator P2G ... Series

## 1. Introduction

P2G is a data logger, GSM modem and safety isolation in a single unit.

P2G-K17V03I01 type: 4 pulse inputs, 4 isolated optocoupler outputs

P2G-K17V03I00 type: 2 pulse inputs and 2 associated tamper inputs, 2 isolated optocoupler outputs

Read carefully all the instructions in this document. You must not start the installation before taking these instructions into account. If you do not consider these instructions, you risk facing serious corporal and/or material injuries.

### 2. Installation

**Location:** According to 94/9/CE ATEX directive P2G is an associated electrical apparatus, which must be installed in the safe area (surface industries), but with an intrinsically safe pulse input circuit, which can be connected to an apparatus of Category 1 (Zone 0) or lower. The ambient temperature  $T_a$  must not exceed  $-20^{\circ}$  C  $\leq T_a \leq +60^{\circ}$  C. Installation of this equipment shall be carried out by suitably trained personnel according to the applicable code of practice (EN 60079-14).

**Fixing and mounting:** Remove the unit cover to gain access to the fixing holes. The P2G can be mounted in any position – the correct operation is not position dependent. The housing must be protected against mechanical shocks. Keep the unit tightly closed and sealed with wire seals when in operation.

Electrical wiring: Use only cables supplied by the manufacturer. Electrical wiring must be executed with respect to the sound engineering practice. While connecting the cables, the battery need not be disconnected. Device type P2G-K17V03I01: Remove the dummy grommets and connect the two-wire pulse input cables to sockets IP1, IP2, IP3 and IP4. Connect the four-wire pulse output cables to OP1/OP2 and OP3/OP4 sockets. Note: output OP1 corresponds to input IP1 etc. Leave the dummy grommets in place if an input or output is not connected. Device type P2G-K17V03I00: connect the two 4-wire pulse and tamper input cables to IP1 and T1 and to IP2 and T2 respectively as indicated on the inside plastic cover of the unit. Connect the 4-wire pulse output cable to OP1/OP2 socket. Note: mind the markings I (input) and T (tamper) on the connectors of the 4-wire input cable

**Cable path:** Careful precautions must be taken to avoid electromagnetic couplings with other cables capable of causing hazardous voltages or currents. Cables and wires must be protected against any damages.

**SIM card installation:** Insert the SIM card in the SIM card holder. While inserting the SIM card, the battery need not be disconnected.

**Commissioning:** After wiring the device and installing the SIM card replace the unit cover and use conventional wire seals to seal it. Configure the unit through the optical interface using an appropriate software tool.

## 3. Maintenance

Use only batteries supplied by the manufacturer for replacement. If a fault is suspected or observed, the equipment must be returned to the manufacturer or repaired by authorised personnel.



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