



- Low-consumption technology ●
- Insulating joint remote assessment ●
- Insulating joint remote management ●
- Smart data communication ●
- Instant-off measure on coupons ●
- Interference analysis ●

G4C-PRO JOINT

Remote monitoring of cathodic protection and insulating joint management



G4C-PRO JOINT

Remote monitoring of cathodic protection and insulating joint management, wherever you are

The G4C-PRO JOINT is the new device of the G4C-PRO family which, to the typical cathodic protection monitoring functions, adds an interface to monitor the efficiency of the insulating joint and remotely manage its electrical status.

The JOINT interface only needs to be connected to both sides of the joint and can measure the insulation efficiency, as well as allowing (optionally) the remote management of the opening/closing of the electrical connection of the joint ends.



An integrated solution for greater efficiency

COMPACT DESIGN

All the elements that contribute to the functionality of the device (measurement section, modem, memory, battery, cyclic switch) are integrated in a single compact housing that makes it suitable for any application context.

EASY JOINT INSTALLATION

The G4C-PRO JOINT interface can be connected to any existing and already installed insulation joint, it will connect inside the test pole or JB to the cables coming from both sides of the joint. After an initial calibration, it will promptly detect any insulation failure.

WEBPROCAT

Platform for managing data collected from cathodic protection monitoring devices: analysis, time trends, graphical representation, cartography, regulatory compliance, reporting, device configuration, rectifiers remote control, synchronisation of manual measurements, export, integration with third-party applications (SCADA, SAP, CARTOGRAPHY, etc.).

FIDO UNIVERSAL

The activities carried out by the operator in the field, both in terms of manual measurements and in terms of installation/maintenance of the devices, are managed in the field with the **Fido Universal** application via local communication in Bluetooth Low-Energy and automatically synchronised with **WebProCat**.

A tailor-made solution for the protection of your network

JOINT MANAGEMENT

Continuous monitoring of the joint insulation efficiency with real time alarm and remote control of the joint electrical status. Particularly for gas distribution network, it allows the design of the CP system to be modified, controlling its electrical status remotely.

DAILY REPORT OF 86,400 SAMPLES

Daily summary report of measurements per second with local storage in a cyclic queue with a depth of 1 year: average, minimum and maximum value with date and time of detection; mean square deviation, trend and variability; number and total time of out of threshold.

INSTANT-OFF ON COUPONS PER SECOND

instant-off measurement on the coupon with frequency per second and measurement cycle parameters configurable on a millisecond basis, also for overprotection verification. Compliant with ISO 22426.

CONFIGURABLE MEASURE TRANSMISSION

Sending of daily report or instantaneous value with a defined frequency. When communicating with a SCADA system, polling is possible every minute/hour/day.

MEASURES PER SECOND ON REQUEST

Frequency measurement per second on all channels. Storage of the daily log of 86,400 samples in a cyclic queue for a duration of 7 to 62 days, depending on the enabled channels, and possibility of full transmission on demand.

REAL TIME ALARMS

User-configurable alarm thresholds for each channel and for external power supply failure; possibility of alarm notification (SMS/EMAIL) in real time.



COMMUNICATION PORTS

- Local: BLE with Fido Universal management software
- Remote: 2G/3G/4G or Ethernet with WebProCat/other platforms

JOINT MONITORING

- Input resistance > 10Mohm
- Error < 1%

CATHODIC PROTECTION MEASURE

- 5 galvanically isolated channels
- Simultaneous AC/DC measurement on the same physical channel
- Selectable scales ± 500 mV, ± 20 V, ± 50 V, ± 100 V - DC
- Measurement accuracy: 0,02% FS
- OFF measurement on coupons (instant-OFF), parameterisation to the millisecond
- Protection against impulsive transients 10/350 μ S > 5 KVV

POWER SUPPLY

- Integrated long-life lithium battery (+5 years)
- External solar panel (+10 years) - with external accessory SOLAR BOX
- External (12VDC/220VAC)

MECHANICAL DATA

- Dimensions: L 12.9 x H 8.5 x P 7.7 cm
- IP68/IK07
- Weight: 0.8 kg
- Operating temperature: - 20 °C ÷ + 85 °C
- Installation: DIN rail, Conchiglia, M28, custom

COMPLIANCE WITH STANDARDS

- ISO 15589-1, ISO 22426, ISO 18086, ISO 21857, ISO 22426
- EN 12954, EN 13509
- UNI 11094, UNI 10950, APCE guidelines
- NACE SP0169, TM0497, RP0104



G4C-PRO JOINT

**Remote monitoring
of cathodic protection and
insulating joint management**



Contact us



AUTOMA s.r.l.

Via Casine di Paterno, 122/a - 60131
Ancona (An) - Italy
Tel.: +39.071.8028042
Fax: +39.071.802374

www.byautoma.com
e-mail: info@byautoma.com