

- Measurements with operator
  - Intensive measures
- Instant-off measure on coupons
  - Interference analyses
    - Long-life battery
  - Large storage capacity



**G40** 

On field monitoring of cathodic protection



## **Cathodic protection monitoring in the field with operator**

The G4O is the device of the G4C family suitable for every cathodic protection monitoring application. It has 2 galvanically isolated measurement channels with which to make all cathodic protection monitoring measurements: ON potential, AC interference, junction current (shunt), power supply or drain current (AC and DC), instant-off potential on coupons (thanks to integrated cyclic switch), polarisation current, ground or tube-rail potentials. The large on-board storage space and low power consumption allow it to be used for extended periods without the need to download measurements frequently. The accompanying software, Fido Universal, allows programming of measurements and local downloading with immediate graphing, synchronisation with the WebProCat platform and sharing of the measurement for any kind of offline use.



## An integrated solution for greater efficiency

#### COMPACT DESIGN

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

#### MAINTENANCE & DIAGNOSTICS

To optimise maintenance work in the field, the device also transmits diagnostic parameters (rectifiers, faults, etc.). The firmware update can be carried out locally from the app.

# A tailor-made solution for the protection of your network

### AC/DC MEASURES ON THE SAME CHANNEL

2 galvanically isolated measuring channels on which both DC and AC measurements can be made on the same physical channel, with full scale selectable according to the type of signal measured.

### INSTANT-OFF ON COUPONS PER SECOND

Integrated solid-state switch for instant-off measures on the coupon with frequency per second and measure cycle parameters configurable on a millisecond basis, also for overprotection verification. Complies with the specifications of ISO 22426.

### INTENSIVE MEASURES AND PER SECOND

Measures frequency per second on enabled channels and for the programmed measurement interval. Intensive measures (20 samples per second) can be programmed for on-off measurements with cyclic interruption on cathodic protection rectifiers.

### OFFSET MEASUREMENT MANAGEMENT

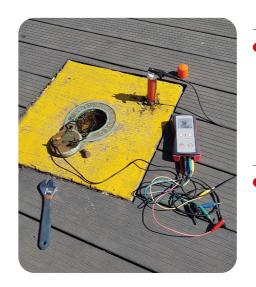
Possibility of setting an offset when programming the measurement, to take into account the calibration of the reference electrode or the use of reference electrodes other than CSE.

### LOW POWER CONSUMPTION & HIGH STORAGE CAPACITY

Powered by 3 AA lithium batteries, allowing up to 300 programming and measurement download cycles per second of 24 hours. Internal solid state memory with storage capacity of up to 62 measurements per second of 24 hours.

### MEASUREMENT MANAGEMENT

With the FIDO UNIVERSAL app, one can have immediate graphing of taken measurements, local download of measurements for offline management, automatic synchronisation with WebProCat platform.



### 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**.

### **COMMUNICATION PORTS**

Local: BLE with Fido Universal management software

### CATHODIC PROTECTION MEASURE

- 2 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 uS > 5 KV

#### **POWER SUPPLY**

3 AA lithium batteries

#### **MECHANICAL DATA**

- Dimensions: L 15.9 x H 7.8 x P 3.4 cm
- IP68/IK07
- Weight: 0.3 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







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