



Low-consumption technology ●

ER-Probe measure ●

Smart data communication ●

Instant-off measure on coupons ●

Interference analyses ●

# G4C-PRO ER PROBE

## Remote monitoring of corrosion and cathodic protection



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## Remote monitoring of corrosion and of cathodic protection, wherever you are

The G4C-PRO ER PROBE is the new device of the G4C family which, to the typical cathodic protection monitoring functions, adds a channel for measuring the corrosion rate through the use of standard ER Probe type probes (Wire Loop, Tube Loop, Cylindrical, Flush, Strip, etc.), representing the value in Probe Life Units in a range from 0 to 1000 and with a resolution of 0.0015% of the probe life time. The WebProCat software manages the calculation of the Corrosion Rate value based on the measurements received, providing both tabular and graphical representation.



## 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.

### MAINTENANCE & DIAGNOSTICS

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

### WEBPROCAT

Platform for managing data collected from corrosion and 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

### CORROSION MEASUREMENT

Measurement of corrosion rate using standard electrical resistance probes (ER Probe) (Wire Loop, Tube Loop, Cylindrical, Flush, Strip, etc.).

### INSTANT-OFF ON COUPONS PER SECOND

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

### 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.

### 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.

### CONFIGURABLE MEASURES AND ALARMS 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.

### 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 with WebProCat/other platforms

### CORROSION MEASUREMENT WITH ER PROBE

- Range: 0-65535 Probe Life Units (shown with values from 0.00 to 1000.00)
- Resolution: 0.0015% of probe life time
- Data Storage: > 100,000 readings

### CATHODIC PROTECTION MEASURE

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

### POWER SUPPLY

- Integrated long-life lithium battery (+5 years)
- Integrated solar panel (+10 years) - G4F-SAT
- External solar panel (+10 years) - 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  $\div$  + 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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Contact us



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