

Datalogger DL852C is a portable, pocket-sized, two-channel device, specifically designed to meet the needs of **monitoring the cathodic protection** of underground metallic structures or in contact with environments not immune to corrosion phenomena. The device provides measurements of the **electrochemical potential of the steel structure to be monitored** and of its possible variation over time due to **electrical interference conditions**.

The **DL852C** is used for data collection to be carried out automatically on site. After having programmed it in the office or directly in the place of use, the **DL852C** is then connected both to the reference electrode (portable or permanent) and to the structure to be monitored and, therefore, activated by means of a specific switch.

At the end of the monitoring campaign, the measurements collected by the **DL852C** must then be transferred to an external PC for data analysis.



Advantages

- Two measurement channels set up with a switch for potential difference values up to ± 50 V, with impedance > 20 M Ω , or for potential difference values up to ± 2.5 V, with impedance > 1 G Ω
- Measurements of potential differences are obtained with respect to the reference electrodes without absorbing or delivering currents exceeding microamps or on system/plant resistors (scales from ±20 mV to ±2.5 V)
- Standard measurements for the monitoring of cathodic protection are provided up to a maximum of ±50 V in direct current



cescor DL852C is a device for the monitoring of cathodic protection and of possible variations in potential caused by electrical interference

Cescor DL852C



TECHNICAL SPECIFICATIONS

- Scales programmable via software, with the following full-scale values: from ±20 mV to ±2.5 V for high impedance measurements; from ±400 mV to ±50 V for standard measurements
- Resolution: ≥ 16 bit
- Measurement accuracy: 0.05% referred to selected full-scale range
- Input impedance: > 20 MΩ for channels with range from 400 mV to 50 V; ≥ 1 GΩ for channels with range from 20 mV to 2.5 V
- Bandwidth of the two measurement channels: 0 ÷ 1 Hz
- DL852C configuration/programming: software created using the supplied application running on Windows
- Data memory: 512 Kb, therefore more than 250,000 data (with mV resolution on high impedance setting)
- Sampling rate: from 5 samples/s to 1 sample/minute
- Duration of data recording between two internal battery recharges: approximately 4/5 days
- Internal battery capacity: 2,300 mAh
- Internal battery charging time: approximately 6 8 hours
- Status indicator via a green LED and a red LED on the front panel
- Interface cable and battery charger: supplied with each device
- Dimensions: 145 x 85 x 35 mm
- Weight: approximately 0.3 kg



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