



DL8M

Lithium Integrated battery 24 bit

8 channels data logger, 24 bit, bluetooth configuration

DL8M is the ideal solution for all environmental or structural monitoring in which high resolution, velocity of implementation and low costs of system management are required, together with the greatest simplicity in management and processing acquired data. DL8M allows to briefly and easily realize independent systems of monitoring whose acquired data are remotely accessible through the web due to integrated server. By the app, downloadable from DL8M management app store, it is possible to realize planning and local management of data logger through bluetooth connection with any smartphone or tablet. Through management app, it is possible to operate planning and local management of the instrument through bluetooth connection or GPRS / Ethernet remote connection.

DL8M data acquisition platform is characterized by:

- High resolution: 24 bit resolution and high level of repeatability of measurements in any condition of operation, make DL8M ideal for the application in which high level of reliability and strengths of instrument are required. High modularity which allows to configure, in a very simple way, simple monitoring systems, composed by single units for few sensors management, but also real monitoring network made up by many DL8M units connected in network creating a widespread network and configurable as desired for the number of units and different kind of dislocated sensors.
- Multiparameter: in fact it is possible to connect any type of sensor present on market and mostly used in monitoring structural applications as inclinometers and strain gauges.
- Compactness: DL8M instrument is a data logger designed for rapid and versatile use. This allows a very high savings in installation and data acquisition system startup phase, operation that becomes extremely easy and fast by the simple and very intuitive user interface which allows the operator to start data acquisition in few minutes with few simple connections.
- Connectivity: optional modules for GPRS and Ethernet communication allow displaying of acquired data in real time both numerically and graphically, on any device connected to internet by accessing to dedicated page available on MAE servers.
- Local and remote alarm management: instrument allows for each single sensor setting of alarm thresholds that when exceeded can send remote alarm signals with preconfigured modalities and locally activate signs of visual signaling, signs of danger, traffic light, flashing or acoustic signs as sirens or pre-recorded vocal messages. Reporting of possible threshold overcoming can be notified with SMS.

It is possible to install data logger also in remote or without current areas, supplying instrument and sensors with different power photovoltaic kit, to be sized according frequency of readings and absorption of sensors.

Methodologies

Crack monitoring

General

Number of channels	8
Power supply	rechargeable internal batteries Li-Ion @ 3,7V, 10.4Ah
Power consumption	1,5 A
Average autonomy	16 hours
Environmental conditions	Temperature (°C) 0 to 60
Connections	GSM and LAN (optional), USB (data output), Bluetooth (configuration)
Data storage	micro SD 8 Gb removable memory
Data format	TSV
GPS	No
Case	Aluminium rack mount
Dimensions	L190 mm x P110 mm x H60 mm
Weight	0,6 kg
Outputs	2 (clean contacts, NC/NA) 12V 500 mA

Acquisition

A/D converter resolution	24 bit
Maximum distortion	0.0005%
Maximum range of input signal	+/-2.5V
Input impedance	39 KOhm
Sampling interval	1 second to 96 hours

General

Input	single ended (voltage 0-5 or 0-10V, current 4-20mA) or differentials with software configuration
Signals conditioning	external module
Clock	integrated with backup battery
Measure options	relative or absolute

