

# SINGLE OR DUAL CHANNEL DATALOGGER

Model DL-100/200

ROCTEST  
TELEMAC

## APPLICATIONS

The DL-100/200 is a datalogger designed to monitor vibrating wire sensors and their internal thermistor. It is well suited for small projects where only a few sensors are installed, or for sites where heavy traffic or electrical noise prevents the use of long cables.

## DESCRIPTION

The DL-100/200 is a stand-alone, user-friendly data logger designed to be used with any of Roctest or Telemac lines of vibrating wire sensors. It can also read most of vibrating wire sensors from other manufacturers except those based on auto-resonant circuitry.

The DL-100/200 Logger is available in a single or dual-channel version for monitoring either one or two vibrating wire sensors and their thermistors. The datalogger is housed in a weather resistant, rugged, aluminium cast Nema 4X enclosure. Power is supplied by two easily accessible 'AA'-size batteries or two NiMH rechargeable cells of the same size, giving a typical autonomy of 1 year. Built-in non-volatile memory allows the storage of 837 K readings (expandable to 3.35 M readings). Each reading includes time stamp, period, and temperature. The DL-100/200 logger is supplied with the DLTalk graphic user interface running under Windows® XP/2000, which allows configuration, communication, monitoring and data collection.

The DL-100/200 Logger is simple to use. The logger is installed on site and connected to the sensor(s). Then, it must be connected to a laptop via RS-232 or USB serial cable. By using DLTalk, the operator can select the sensor type, the start acquisition time, the stop acquisition time the reading intervals for data logging and the measuring units used for sensors' calibration and also for the readings. The constant reading interval can be set from 1 second to 100 hours. Alternatively, a time acquisition sequence consisting of a multitude of user-defined time intervals can be selected. The user can also verify the operation of each sensor in real time, by choosing the graph mode. The user can check the data logging any time on site, by connecting its laptop to DL-100/200 and downloading the information as comma separated values (.csv) file, easy to import into most spreadsheets.

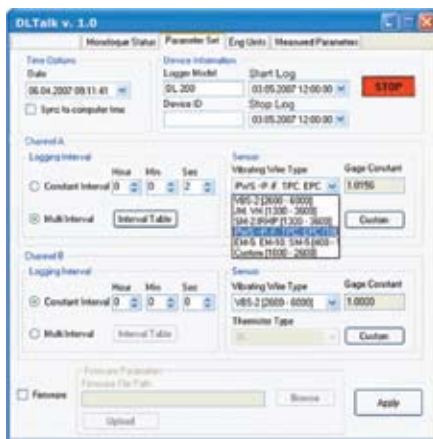


## FEATURES

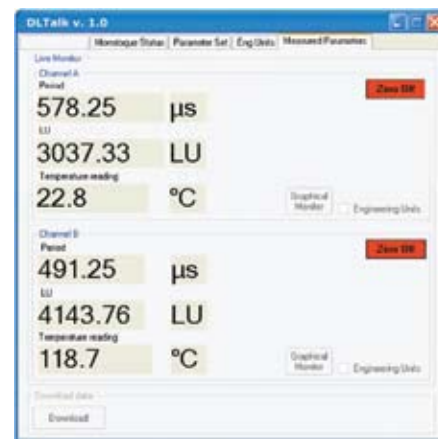
- Stand-alone, user-friendly datalogger
- Compatible with most vibrating wire sensors
- Usable in harsh environments
- Long battery life
- Available in single or dual channel version
- User friendly Windows® host software included
- Programmable constant or multiple acquisition intervals

## SPECIFICATIONS

Number of channels	One or two
Sensor reading	Programmable between 1 second and 100 hours, in 1 second increments
Number of logging events	Up to 837 000 per channel
Period measuring range	From 160 $\mu$ s to 2500 $\mu$ s
Period measuring accuracy	$\pm 0.02 \mu$ s
Period measuring resolution	$\pm 0.01 \mu$ s
Temperature measuring accuracy	$\pm 0.5^{\circ}\text{C}$ ( $\pm 0.9^{\circ}\text{F}$ )
Real time clock error	$\pm 2$ min/month
Real time clock drift related to temperature	0.1 sec/month/ $^{\circ}\text{C}$
Operating and storage temperature	From $-40^{\circ}\text{C}$ to $+85^{\circ}\text{C}$
Power supply	2 $\times$ AA-size alkaline batteries (NiMH in option)
Power autonomy	1 year, typical, for one reading a day, one measurement per minute, one log every 30 days at $20^{\circ}\text{C}$ . Cold temperature reduces power autonomy.
Waterproof	NEMA 4X, (UL 508) – Submersible, up to 60 cm of water
Corrosion resistance	NEMA 4X
Housing	Aluminum cast, waterproof
Shock resistance	Fall from 750 mm on concrete
DLTalk (Windows <sup>®</sup> user interface) minimum requirements	IBM-compatible PC, Pentium 3 at 600 MHz, 256 MB RAM, one USB 1.1 port, Windows XP/2000
Nominal size	3.8 cm $\times$ 5 cm $\times$ 15.25 cm
Weight	Approx. 500 g



'Parameter Set' DLTalk Screen



'Readings' DLTalk Screen

## ORDERING INFORMATION

Unit includes batteries & DLTalk software

Please specify:

- Number of channels required
- Accessories

## ACCESSORIES

- RS-232 jumper cable
- RS-232-to-USB adapter cable



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