



# Single Channel Vibrating Wire Data Logger



Single Channel Vibrating Wire Data Logger shown with an RST Vibrating Wire Piezometer

The Single Channel Vibrating Wire Data Logger is a low cost, battery powered data logger, designed for reliable, unattended monitoring of a single vibrating wire sensor and thermistor.

It is a purpose built logger ideal for remote locations or instruments that require frequent reliable data recording. It connects to all vibrating wire sensors including piezometers, crack meters, and strain gauges. However, the Single Channel Vibrating Wire Data Logger will not connect to vibrating wire sensors with auto resonant circuitry.

Vibrating wire sensors have unique advantages in geotechnical applications, as the frequency output of the gauge is immune to external electrical noise, able to tolerate wet wiring without signal degradation, and able to transmit the signal upto 1.6 kilometers without loss



**RST Instruments Ltd.**  
200 - 2050 Hartley Ave.  
Coquitlam, BC  
Canada V3K 6W5

Telephone: 604 540 1100  
Facsimile: 604 540 1005  
Toll Free: 1 800 665 5599



[info@rstinstruments.com](mailto:info@rstinstruments.com)

[www.rstinstruments.com](http://www.rstinstruments.com)

## applications

Ideal for applications that require reliable, unattended monitoring of a single vibrating wire sensor.

## features

### HARDWARE

Robust construction.

128K memory.

Weather resistant  
NEMA 4X (IP65) enclosure.

Battery powered  
for remote sites.

100 year memory backup.

Compatible with all VW sensors  
- excluding those with auto  
resonant circuitry.

-40°C to 60°C (-40°F to 140°F)  
operating range.

0.01µs vibrating wire resolution.

16 bit analog/digital converter.

### SOFTWARE

User friendly Windows®  
host software included at no  
additional cost.

Compatible with most  
spreadsheet software.

Data stores in CSV format,  
and opens in Microsoft® Excel.



specifications + ordering info

# Single Channel Vibrating Wire Data Logger



## general specifications

DESCRIPTION	SPECIFICATION
Frequency Accuracy	0.01% Full Scale
Resolution	1 part in 65,000
Memory	Over 30,000 records including: time, frequency <sup>2</sup> , temperature
Power Source	2 'AA' batteries
Battery Life	Over 5 years / 20 memory fills depending on temperature and use
Communication	RS232
Dimensions	150 x 65 x 40 mm (5.9 x 2.6 x 1.6 in.)
Temperature Range	-40°C to 60°C (-40° to 140°F)
Enclosure	NEMA 4X (IP65)

## data storage specifications

DESCRIPTION	SPECIFICATION
Memory	128K
Data Transfer	30 seconds
Interval Mode	2 seconds to 1 day
Variable Rate Mode	16 user programmable sampling rates
Time Format	Month / day / year Hour / minute / second
Memory Full Behaviour	"Wrap around" or "fill & stop" option

## optional equipment

Communications cable

## ordering info

PART #	DESCRIPTION
DT2011	Single Channel Vibrating Wire Data Logger
DT2410	Ultra-Rugged Field PC



Setup the data logger and collect data using the Ultra-Rugged Field PC.

Screenshot of LogViewerCE software as shown on the Ultra-Rugged Field PC.

GEOTECHNICAL . MINING . ENVIRONMENTAL . STRUCTURAL