



# DT2055 Ten Channel Data Logger



The DT2055 Ten Channel Data Logger is a low cost, battery powered data logger, designed for reliable, unattended monitoring of up to 10 sensors which may be any mix of vibrating wire sensors and thermistors, typically 5 vibrating wire sensors with their associated thermistors.

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 DT2055 Ten Channel 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 up to 1.6 kilometers without loss.



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## applications

Ideal for applications that require reliable, unattended monitoring of up to five vibrating wire sensors.

## features

### HARDWARE

Robust construction.

4MB 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

# DT2055 Ten Channel Data Logger



## general specifications

DESCRIPTION	SPECIFICATION
Frequency Accuracy	0.01% Full Scale
Resolution	1 part in 65,000
Memory	Over 120,000 records including: time, 5 channels frequency, frequency <sup>2</sup> , 5 channels temperature
Power Source	1 'D' lithium primary battery
Battery Life	Over 5 years / 2 memory fills depending on temperature and use
Communication	USB type B connector
Dimensions	120 x 122 x 91 mm (4.7 x 4.8 x 3.6 in.)
Temperature Range	-40°C to 60°C (-40° to 140°F)
Enclosure	NEMA 4X (IP65)

## data storage specifications

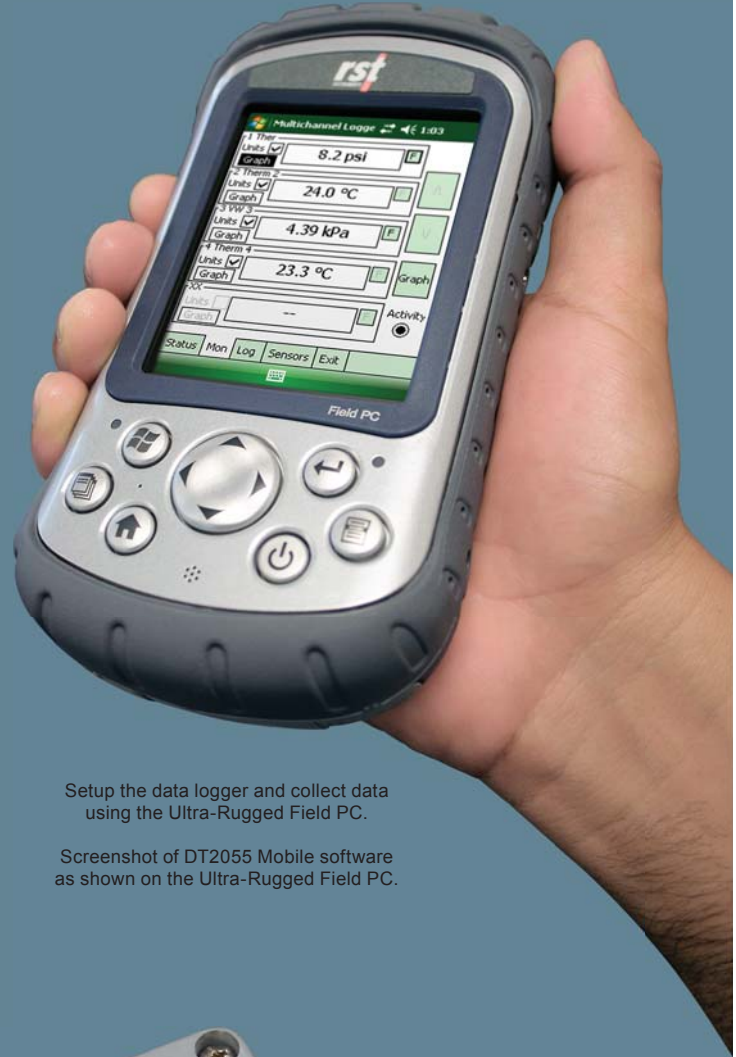
DESCRIPTION	SPECIFICATION
Memory	4 MB
Data Transfer	5,000 data points per second
Interval Mode	10 seconds to 1 day
Variable Rate Mode	16 user programmable sampling rates
Time Format	Month / day / year Hour / minute / second
Memory Full Behaviour	"Wrap around" or "fill & stop" option

## optional equipment

Communications cable
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## ordering info

PART #	DESCRIPTION
DT2055	Ten Channel Data Logger
DT2055-T	Ten Channel Data Logger - Single Gland
DT2410	Ultra-Rugged Field PC



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

Screenshot of DT2055 Mobile software as shown on the Ultra-Rugged Field PC.



Ten Channel Data Logger with Single Gland; optional connector available, contact RST for complete details.

GEOTECHNICAL . MINING . ENVIRONMENTAL . STRUCTURAL