DT2055B Ten Channel Data Logger

The DT2055B 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 DT2055B 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.

Data logger setup and data collection is done using the Ultra-Rugged Field PC[2] or a laptop. Multi-Channel Host Software is also included.

A single gland option (DT2055B-T) is also available for Multi-point Vibrating Wire Piezometer Strings or Thermistor Strings.

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applications

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

features

HARDWARE

Option for radio antenna for incorporation into an RST rstar wireless system for acquiring data.

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.

As shown above, the DT2055B can also be equipped with an optional radio antenna to incorporate it into an RSTAR or DT LINK wireless system. RST's RSTAR system uses wireless technology to provide automated data acquisition and DT LINK allows wireless collection of data logger data in hard to access areas.

Certified System
ISO 9001

DT2055B Ten Channel Data Logger

ULTRA-RUGGED
Field PC²

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, frequency², 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
RSTAR L900 radio option
DT LINK WIRELESS option

ordering info

PART #	DESCRIPTION
DT2055B	Ten Channel Data Logger
DT2055B-T	Ten Channel Data Logger - Single Gland
IC32000-AR2-RSTS	Ultra-Rugged Field PC²
OPTIONAL	
RSTAR L900 - automated wireless data collection	
DT2055B DTLINK - wireless data collection	

Setup the data logger and collect data using the Ultra-Rugged Field PC².

Screenshot of DT2055B Mobile software as shown on the Ultra-Rugged Field PC².

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