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PRODUCT CATEGORY:

# DT2055B: 5/10 Channel Vibrating Wire/Thermistor Data Logger

The DT2055B: 5/10 Channel Vibrating Wire/Thermistor 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.

The DT2055B is 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 PC2 or a laptop. DT Logger Host Software is also included.

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

The DT2055B can also be equipped with an optional radio antenna (see photo) to incorporate it into an RSTAR or DT LINK wireless system (see separate brochures).

### > APPLICATIONS

Where reliable, unattended monitoring of up to 10 sensors (which may be any mix of vibrating wire sensors and thermistors) is required.

### > FEATURES

## HARDWARE:

Robust construction.	4MB memory.	
Battery powered for remote sites.	-40°C to 60°C (-40°F to 140°F) operating range.	
Compatibility with all VW sensors - excluding those with auto resonant circuitry.	Option for radio antenna for incorporation into an RSTAR system or DT LINK.	
100 year memory backup.	Weather resistant NEMA 4X (IP65) enclosure.	
$0.01\mu s$ 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.

### > BENEFITS

✓	Increase Productivity	✓ Upgradable	
✓	High Reliability	✓ Custom Options	
✓	High Accuracy	✓ Cost Effective	









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.





# DT2055B: 5/10 Channel Wibrating Wire/Thermistor Data Logger

# **SPECIFICATIONS + ORDERING**

SPECIFICATIONS				
GENERAL				
ITEM	SPECIFICATION			
Frequency Accuracy	0.01% Full Scale			
Resolution	1 part in 65,000			
Memory Records	Up to 120,000 records including: time, 5 channels frequency, frequency <sup>2</sup> , 5 channels temperature			
Power Source	Lithium compact or standard cell battery (NOTE: standard cell required for radio use)			
Battery Life	Up to 4 years (non-radio or RSTAR) or 3.5 years (DT LINK) (NOTE: above specs based on 1 hour reading frequency and dependent on temperature and use)			
Communication	USB Type B connector (radio optional)			
Dimensions	120 x 122 x 90 mm (4.72 x. 4.80 x 3.54 in.)			
Temperature Range	-40°C to 60°C (-40° to 140°F)			
Enclosure	NEMA 4X (IP65)			
MEMORY				
Memory Size	4MB			
Data Transfer	4,000 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			

ORDERING	Available for IMMEDIATE DELIVERY	
ITEM	Contact RST for Details	PART #
DT2055B: 5/10 Channel Vibrating Wire/Thermistor Data Logger		DT2055B
DT2055B: 5/10 Channel Vibrating Wire/Thermistor Data Logger - Single Gland		DT2055B-T
Ultra-Rugged Field PC2		IC32000-AR2-RSTS
Cable Gland Nut Wrench		DT100
Pole Mount Kit		DT20XX-M2
8" Secondary Enclosure		DT2055-SE

### **OPTIONS**

RSTAR L900 - automated wireless data collection



DT2055B DTLINK - wireless data collection



Contact RST for Details



DT2055B Data Logger with Single Gland; optional connector available, contact RST for complete details.





The DT2055-SE Secondary Enclosure houses the DT2055B. The enclosure uses an 11mm nut driver to secure the removable cover.





The Cable Gland Nut Wrench (DT100) improves access to the glands when compared to a standard wrench.