

DTL201B/DTL202B: Uniaxial/Biaxial Digital Tilt Loggers

Description

NOTE: This is a legacy and discontinued product not available for order.

RST's family of Digital Tilt Loggers are low cost, battery powered data loggers and tilt meter in a single, compact unit. They measure tilt in either one (uniaxial) or two (biaxial) perpendicular axes in the plane of the base and are intended to be permanently installed to provide long term observation with maximum resolution and sensitivity.

The DTL201B (uniaxial) and DTL202B (biaxial) Digital Tilt Loggers are designed for either manual monitoring or remote data acquisition. The optional radio antenna allows them to be incorporated into an RSTAR Array Radio System for automated, remote data acquisition. The optional radio antenna can also be used for enabling the DTL201B and DTL202B for RST's DT LINK which allows wireless collection of data logger data in hard to access areas.

RST's Digital Tilt Loggers consists of one or two MEMS tilt sensors, a battery supply, non-volatile memory, USB cable and Windows® host software. The electronics are housed in a NEMA 4X (IP-65) enclosure for environmental protection, and is typically bolted to the structure via mounting plate or bracket.

DTL201B/DTL202B: Uniaxial/Biaxial Digital Tilt Loggers Specifications

ITEM	SPECIFICATION
Range	$\pm 15^\circ$
Resolution	± 2 arc sec. ($\pm 0.0006^\circ$) (0.01 mm/m)
Non-linearity	$\pm 0.0125\%$ F.S. ($\pm 0.002^\circ$) (0.03 mm/m)
Repeatability	$\pm 0.0125\%$ F.S. ($\pm 0.002^\circ$) (0.03 mm/m)
Sensor	MEMS (Micro-Electro-Mechanical Systems) Accelerometer
Power Source	Lithium Ca or D cell battery
Battery Life	> 1-2 years
Communication	- USB Type B connector - Optional radio for RSTAR and/or DT LINK
Operating Temp.	-40 to 60°C (-40 to 140°F)
Dimensions	120 x 120 x 100 mm (4.72 x 4.72 x 3.94 in.)

MEMORY SPECIFICATIONS

ITEM	SPECIFICATION
Memory Size	4MB
Data Transfer	2,300 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

SPECIFICATIONS