

Digital Tilt Logger



The Digital Tilt Logger is a low cost, battery-powered data logger and tilt meter in a single compact unit. It measures tilt in either one or two perpendicular axes in the plane of the base. The unit is intended to be permanently installed to provide long-term observation with maximum resolution and sensitivity, and is conveniently designed for manual monitoring or remote data acquisition.

The Digital Tilt Logger consists of one or two MEMS tilt sensors, a battery supply, non-volatile memory, USB cable and Windows® host software.

The tilt meter may be either uniaxial or biaxial. The electronics are housed in a NEMA 4X (IP-66) enclosure for environmental protection and is typically bolted to the structure via a mounting plate or bracket. The internal MEMS accelerometer is the same as used in the in-place MEMS Digital Tilt Meter.

Applications

For monitoring and logging tilt data in:

- ~ Retaining walls
- ~ Diaphragm walls
- ~ Concrete dams
- ~ Party walls
- ~ Structures
- ~ Bridge piers
- ~ Tunnels
- ~ Compensation grouting
- ~ Slopes
- ~ Piles

Features

- ~ Data logging & tilt monitoring capabilities in one unit
- ~ Ultimate accuracy and repeatability
- ~ Uniaxial or biaxial sensors option
- ~ Horizontal or vertical mounting
- ~ Easy to install
- ~ Cost effective
- ~ 4MB memory
- ~ Battery powered for remote sites
- ~ -40°C to 60°C operating range
- ~ 16 bit analogue/digital converter



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Specifications

TILT SPECIFICATIONS	
Range	±15°
Resolution	±2arc sec
Non linearity	±0.0125% FS
Repeatability	±0.125% FS
Sensor	MEMS
Power source	Lithium siz C 3.6V
Battery life	>1-2 years
Operating temp	-40 to +60°C
Dimensions	100 x 100 x 82mm
DATA STORAGE SPECIFICATIONS	
Memory	4MB
USB 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
Communication	USB Type B connector

Ordering Information

- ~ Range
- ~ Axis
- ~ Output
- ~ Mounting



Specifications may change without prior notice