

The RST ELS Submersible Tiltmeter provides precision real-time remote monitoring of tilt of submerged structures. It consists of a uniaxial electrolytic sensor and electronics mounted inside a rugged waterproof enclosure.

The instrument housing is machined from solid stainless steel bar, providing extreme endurance for long-term high-pressure underwater service. The cable entry is a submarine grade connector, which can be connected underwater and provides watertight performance at depths to 2,000 meters.

The uniaxial electrolytic tilt sensor is internally connected to AC signal conditioning which provides power regulation, AC excitation, synchronous demodulation, and quiet, low-noise analog signal output.

The substantial mounting base provides for in-place leveling with excellent rigidity and strength of the completed installation.

The RST Submersible Tiltmeter is an excellent choice for monitoring of dams and offshore structures.



Submersible Tiltmeter shown with fixed cable seal. Optional submarine grade connector also available.

FEATURES

Solid construction for extreme endurance over long-term, high-pressure underwater situations.

Substantial mounting base provides for in-place leveling with excellent rigidity and strength of the completed installation.

High accuracy and repeatability.

Built-in transient protection.

Watertight performance.

APPLICATIONS

Remote, real-time monitoring of inclination of concrete-face rockfill dams slabs and concrete dams. Monitoring of tilt of retaining walls, piles and bridge piers.

SPECIFICATIONS

Model	IC6603	IC6610
Range	+/- 3 deg	+/- 10 deg
Resolution	1 arc sec. (2.8e-4 deg)	Within full range: 15 arc sec. (4.2e-3 deg) Within +/- 4 deg: 2 arc sec. (5.6e-4 deg)
Differential Output	~ +/- 0.70 VDC	
Repeatability	+/- 0.001 deg	+/- 0.006 deg
Sensor Type	Electrolytic Tilt Sensor	
Excitation	8-15 VDC	
Temp. Sensor	2252 Ohm Thermistor, 0.1°C	
Operating Current	~3mA	
Storage Temp.	-55 to 105°C (-67 to 221°F)	
Operating Temp.	-40 to 50°C (-4 to 122°F)	

ORDERING INFORMATION

Data logger	CR10X
Readout unit	ICD3540
Signal Cable	EL380006-6 conductor 22 G OSD with polyurethane jacket

Specifications may change without notice. ICB0029D



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The RST Instruments Management System is certified to ISO 9001:2000

