



EWS

TELEMETRY TILTMETER



Triaxial Tilt



Multi-Comms (4GLTE or Satellite)



Long-life Battery



High Accuracy Digital MEMS Sensors

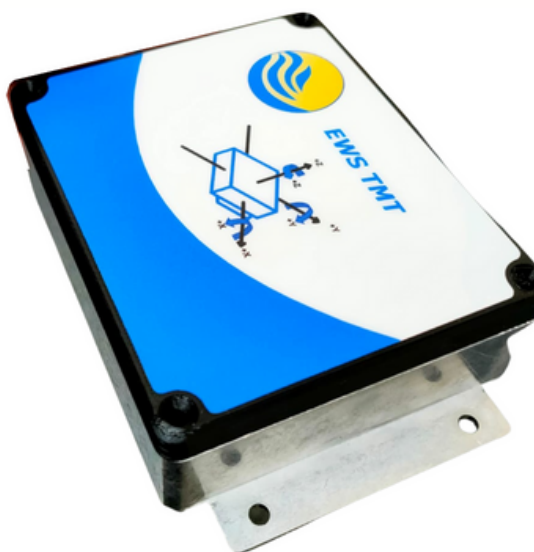


Robust Built for tough Environments

The EWS Telemetry Tilt Meter integrates the power of EWS wireless IoT monitoring technology with a highly accurate in-built Tri-axial tilt sensor for remote monitoring of a range of geotechnical and structural applications.

The EWS Telemetry Tilt Meter devices are unique in that they do not rely on radio transmission to a centralised gateway. Each EWS device transmits independently over cellular or satellite communications eliminating the risk of single-point failure of the entire monitoring system should the gateway lose power. Each device is capable of transmitting using cellular or Iridium satellite communications.

The EWS Telemetry Tilt Meter data is intuitively presented on Orion iO cloud-based software where cumulative movement can be visualised, alarms set based on threshold values and paginated reports automatically sent to the key decision makers with the latest data.



SPECIFICATIONS

Specifications subject to change without notice.

PARAMETER	MIN	TYP	MAX	UNIT
MECHANICAL				
Size				
Width		125		mm
Length		200		mm
Height		80		mm
Weight				
Unpotted		800		g
Weather protection	IP68			
BUILT-IN TRIAXIAL TILT SENSOR CHANNEL				
MEMS Triaxial Accelerometer				
Range	-15°		+15°	Degrees
Resolution	0.001°			
Sensitivity	0.001°			
Repeatability	-0.002°		+0.002°	Degrees
Non-Linearity:	-0.002 °		+0.002°	Degrees
ENVIRONMENTAL				
Operating Temperature	-20		60	°C
Storage Temperature	-40		65	°C
Humidity	5		95	% Rel
POWER				
External Power Supply Input				
Input Voltage	12		24	V
Input Current			700	mA
Internal Battery (Rechargeable)				
Chemistry		Lion		
Terminal Voltage	6.8	7.8	8.4	V
Capacity		1.8/4.8		Ahr
Internal Battery (Non-rechargeable)				
Chemistry		LiMnO2		
Terminal Voltage	6.8	7.8	8.4	V
Capacity		4.8		Ahr
Sensor Power Output				
Output Voltage	11	12	13	V
Output Current			500	mA
Digital Output				
Output Voltage	11	12	13	
Estimated Battery Life	5		10	Years
STORAGE				
Non-volatile-Log				
Size		4		MB

Events		256000		Events
CLOCK				
RTC				
Accuracy (-10 to 70°C)		20	70	ppm
Network Time Sync Support				
Supported Networks		Iridium		
Cellular				
Parameter	Min	Typ	Max	Unit
PARAMETER	MIN	TYP	MAX	UNIT
TELEMETRY SUPPORT				
Iridium				
Protocols		Short Burst Data		
Coverage		Worldwide		
4G Cellular LTE-M/NB-IOT				
Protocols		MQTT		
Email				
Network Support		Telstra		
Coverage		4 million		Sqr km
Myriota				
Protocol		AWS Lambda		
Coverage		Australia Wide		
BLUETOOTH SUPPORT				
Bluetooth Standard		5.0		
Data Rate		2.5		kbps