# Sherborne **Sensors**



# **Applications**

Pre flight calibration

Tarmac level measurement

Floating pontoons

Automotive alignment

Road bed analysis

# **WTS Series**

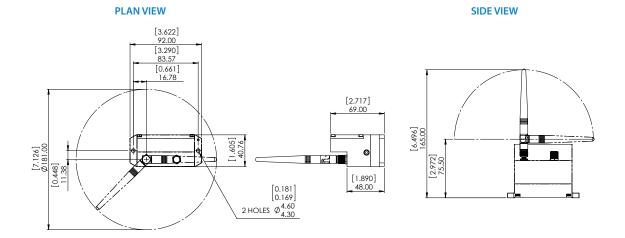
All-weather radio telemetry inclinometer system

### **Features**

- Advanced MEMS inclinometer design for ultra-reliability and performance
- Distortion free digital 2 way radio system for data integrity
- Worldwide licence exempt 2.4 GHz radio
- Remote power on/off (sleep/wake)
- 100 metre (328 feet) range
- Rechargeable or alkaline battery options
- Stainless Steel sealed construction for all-weather use

### **Benefits**

- Wireless
- Very low power consumption for long battery life





# **Specifications**

Specifications by Range @ 20°C		±5°	±15°	±30°	±60°
Deviation from True Angle	Degrees	0.08	0.02	0.02	0.05
Resolution	Degrees	0.003	0.003	0.004	0.006
-3dB Frequency	Hz		į	5	
Internal Resolution	Bits		2	4	
Zero Offset	Degrees (max)		±0	.02	
Thermal Zero Shift	%FSO/°C		±0.	007	
Thermal Sensitivity Shift	%Reading/°C		±0.	007	
Data Format	Degrees				
Warm Up Time	Seconds (to 99.9% of final value)		<	5	

#### **General Radio**

Licence		Licence Exempt
Modulation method		MS (QPSK)
Radio type		Transceiver (2 way)
Data rate	kbits/sec	250
Radio Frequency	GHz	2.4000 (min) to 2.4835 (max)
Power	mw	1
Range (see note 1)	Metres (feet) (max)	100 (328)
Channels (DSSS)		16

Battery Life in Low Power Mode		
Generating Results at 3Hz		

2 x AA Alkaline cells	Constantly on	25 Hours
2 x AA Alkaline cells	3 sessions per day of 5 minutes	100 Days
Rechargeable Li-lon Pack	Constantly on	45 Hours
Rechargeable Li-Ion Pack	3 sessions per day of 5 minutes	180 Days

Usage

#### **Environmental Characteristics**

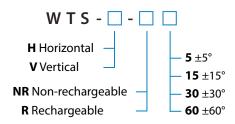
Operating Temperature Range	°C	-20 to 60
Storage Temperature Range	°C	-20 to 85
Humidity	%RH (min)	95
Shock Survival		1000g, 0.5msec, $\frac{1}{2}$ sine
Vibration Endurance		20g rms, 20Hz to 2000Hz sinusoidal
Environmental Sealing		IP67 / NEMA 6

#### **Notes**

1. Typical range achieved in open field site with WTS at a height of 1 metre (3 feet) above ground and handheld display held at chest height pointing towards the WTS.

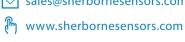
### **Model Designation & Ordering Code**

**Typical Battery Life** 



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