

Battery Operated Servo-Inclinometer / Accelerometer, TSB Series

FEATURES:

- Operates from a single 9V battery, 3mA current
- Low range acceleration/tilt sensor
- High accuracy closed loop operation
- Infinite resolution
- Excellent repeatability
- High environmental resistance
- Fast response
- Low power unregulated supply
- High level, low impedance output



SPECIFICATIONS:

	ACCELERATION	TILT
Measuring range	$\pm 0.1g$, up to $\pm 1g$	± 5 to ± 90 degrees
Non-linearity error ¹⁾	0.01%FR typ	0.01%FR typ
Resolution	$< 0.00001g$	< 1 arc-sec
Non-repeatability & Hysteresis	0.005% FR	
Sensitive axis misalignment	< 0.5 deg	
Cross-axis sensitivity	$< 0.002g/g$	
Bias	$< 0.1\%$ FR	
Power supply	9VDC @ 3mA unregulated (7 to 12VDC)	
Output	$\pm 5v$ FS @ 10 mA max.	
Output impedance	$< 10 \Omega$	
Step response	50 msec	
Zero temperature coefficient	2 arc-sec / $^{\circ}C$ typ	
Span temperature coefficient	0.01%/ $^{\circ}C$ typ	
Temperature range ($^{\circ}C$)	-30 to +70 operating -40 to +85 survival	
Maximum overload	100g constant acceleration	
Shock survival	250g, 11msec	
Housing material	Sulfuric anodized # 2024 Aluminum alloy	
Weight	100 grams	

Notes: 1) Non-linearity error defined as maximum deviation of any point from the theoretical sine function line, in percents of the full measuring range.

DIMENSIONS (INCH/[mm]):

