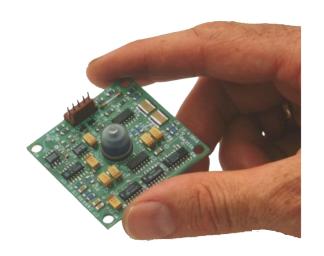




# 4

## 900 Biaxial Clinometer

The model 900 Biaxial Clinometer is an inexpensive, gravity-referenced clinometer (tiltmeter) with a wide dynamic range. Its small size and high precision make it a versatile choice for many measurement and control applications. Units are available with +/-2.5V or 0-5V DC output. Custom calibration ranges are also available on request. Units ship standard with 18" hook-up cable. Use the model 900 for industrial pitch and roll measurements, platform position and control, OEM assemblies, specialized research applications, and more.

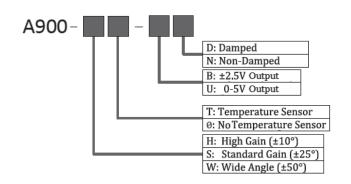


	High-Gain	Standard	Wide-Angle
Angular Range	±10°	±25°	±50°
Resolution <sup>1</sup>	0.005°	0.01°	0.02°
Repeatability	0.02°	0.02°	0.02°
Scale Factor <sup>2</sup>	4°/V	10°/V	25°/V
Non-Linearity <sup>3</sup>	1%	2.5%	7%
Output	±2.5 VDC or 0-5 VDC		
Channels	X-tilt, Y-tilt, Temperature		
Kz Coefficient (deg/C)	10-20 arcsec/C (typical)		
Ks Coefficient (%/C)	0.03%/C (typical)		
Time Constant	0.15 sec		
Natural Frequency	10 Hz		
Output Impedance	270 ohms, short circuit protected		
Power	+8 to +24 VDC (bipolar output); +10.5 to +26.5 VDC (0-5V output); 7mA,		
	250 mV ripple max, reverse polarity protected		
Environmental	-40 to +85 C operating and storage. 0-90% humidity		
Dimensions	2 x 2 x 0.64 inches (51 x 51 x 17 mm), 0.5 oz. (15g)		
Materials	Glass electrolytic sensor, fiberglass PCB		

<sup>\*</sup>Specifications subject to change without notice on account of continued development; <sup>1</sup>Resolution calculated at 1mV; <sup>2</sup>Linear scale factor calculated from BFSL through calibration curve; <sup>3</sup>Linearity calculated as max % deviation from BFSL. 0.05% linearity achievable using a polynomial

### ORDERING CODE

#### PIN-OUT/WIRING:

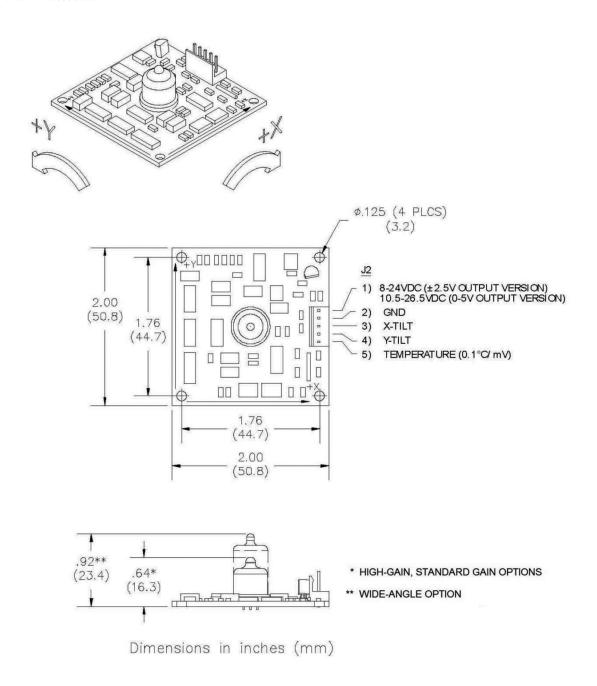


Pin	Color	Function
1	Red	V+
2	Black	GND
3	Green	X-Out
4	Blue	Y-Out
5	Yellow	Temp Out





#### OUTLINE DIAGRAM:



 $^1$ Resolution calculated a 1mV  $^2$ Linear scale factor calculated from BFSL $^3$ Linearity calculated as max % deviation from BFSL. 0.05% linearity achievable using a polynomial

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