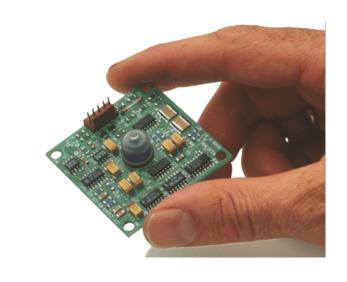


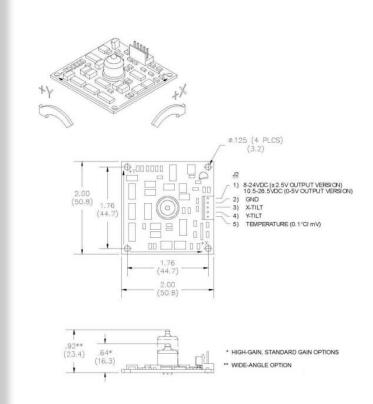
MAKING SENSE OUT OF MOTION

# **Model 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.







### **PERFORMANCE**

VERSION	High-Gain	Standard	Wide-Angle		
ANGULAR RANGE (°)1	±10°	±25°	±50°		
SCALE FACTOR	4°/V	10°/V	25°/V		
NONLINEARITY (%FRO) <sup>2</sup> max	1%	2.5%	7%		
NONREPEATABILITY	0.02°				
RESOLUTION	0.005° 0.01° 0.0		0.02°		
TIME CONSTANT	0.15 sec				
Kz TEMP COEFFICIENT (°/C)	10-20 arcsec/C (typical)				
Ks TEMP COEFFICIENT (%/°C)	0.03%/C (typical)				
OUTPUT	±2.5 VDC or 0-5 VDC				
CHANNELS	X-tilt, Y-tilt, Temperature				

#### **ELECTRICAL & ENVIRONMENTAL**

NUMBER OF AXES	2		
OUTPUT IMPEDANCE (Ohms, nominal)	270		
NATURAL FREQUENCY	10 Hz		
POWER	+8 to +24 VDC (bipolar output); +10.5 to +26.5 VDC (0-5V output); 7mA,250 mV ripple max, reverse polarity protected		
OPERATING TEMPERATURE RANGE	-40° to +85°C		
STORAGE TEMPERATURE RANGE	-40° to +85°C		
WEIGHT	0.5 oz. (15g)		
MATERIALS	Glass electrolytic sensor, fiberglass PCB		

#### **PIN OUT:**

CONNECTOR	FUNCTION	
RED	V+	
BLACK	GND	
GREEN	X-OUT	
BLUE	Y-OUT	
YELLOW	TEMPOUT	

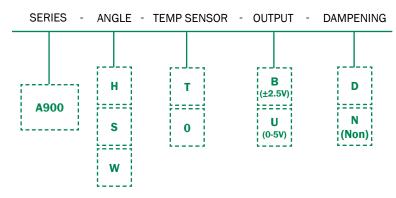
#### NOTES:

- Custom ranges available on request
- Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

Specifications are subject to change without notice due to continued product development



**HOW TO ORDER** Model Numbers are comprised of the series, the number of axes, and the angular range.



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PART #	DESCRIPTION		
81100-05	Extra 18-inch Cable Pigtail for A900, A901, & A902 Analog Clinometers		
81102-01	Extra 18-inch Cable Pigtail for C901 & C902 4-20mA Clinometers		
84063-01	Extra 24-inch Cable Assembly for Iris Tilt Switch, RS232 w/ DB9-sub Connector		
84088-01	Extra 24-inch Cable Assembly for Iris Tilt Switch, RS422 w/ DB9-sub Connector		
84083-01	Advanced Tilt Switch Control Cable (Connects to H3 on IRIS Tilt Switch), 24-inch Flying Leads		

MODEL #	PART #
A900-H0-BN	98900-09
A900-H0-BD	98900-11
A900-H0-UN	98900-21
A900-H0-UD	98900-23
A900-HT-BN	98900-10
A900-HT-BD	98900-12
A900-HT-UN	98900-22
A900-HT-UD	98900-24
A900-S0-BN	98900-01
A900-S0-BD	98900-05
A900-S0-UN	98900-13
A900-S0-UD	98900-17
A900-ST-BN	98900-02
A900-ST-BD	98900-06
A900-ST-UN	98900-14
A900-ST-UD	98900-18
A900-W0-BN	98900-03
A900-W0-BD	98900-07
A900-W0-UN	98900-15
A900-W0-UD	98900-19
A900-WT-BN	98900-04
A900-WT-BD	98900-08
A900-WT-UN	98900-16
A900-WT-UD	98900-20