

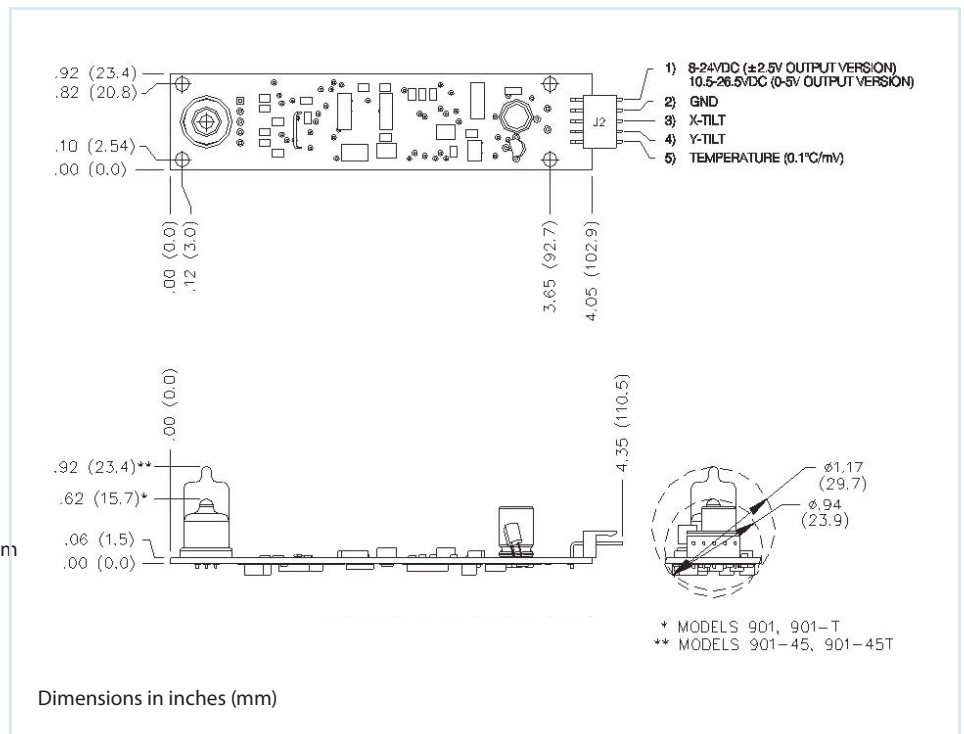
# Models 901 & 902 Slimline Biaxial Clinometers

The Model 901 and 902 Biaxial Clinometers accurately measure angular position where space is limited. These conveniently sized, low-cost units fit neatly into pressure housings, well-logging tools and other

small places. The gravity-referenced Models 901 (horizontal) and 902 (vertical) mount measure rotations about two orthogonal axes and their high-level voltage outputs drive long cables.

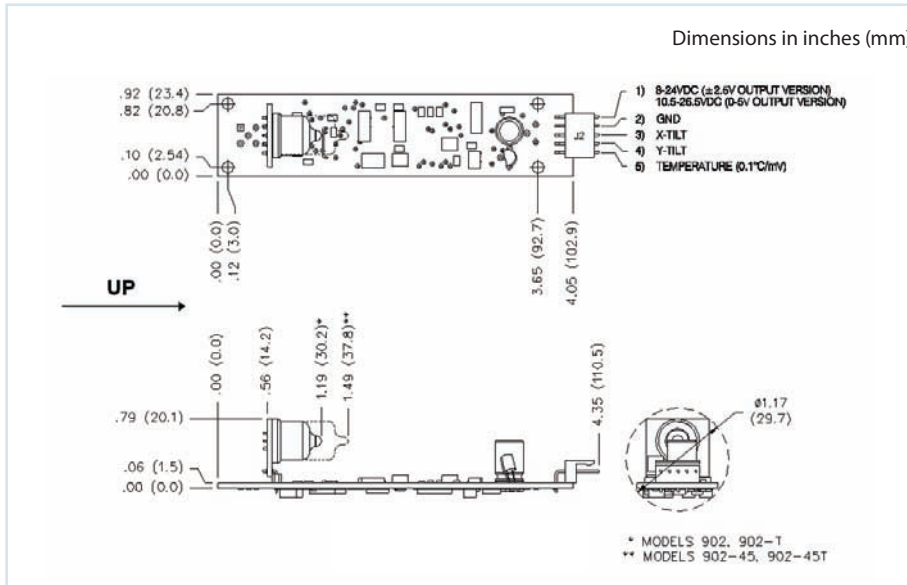


Models 901 (horizontal) and 902 (vertical) Biaxial Clinometers.



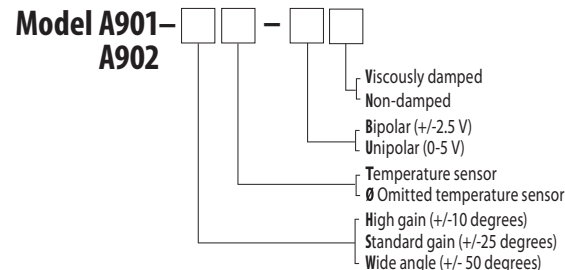
Model 901 and 901-45 Biaxial Clinometers (horizontal mounting)

	MODELS 901 & 902	MODELS 901-45 & 902-45	MODELS 901-H & 902-H
<b>OUTPUT CHANNELS</b>	X and Y tilt, ±2.5 VDC standard, 0-5 VDC available	X and Y tilt, ±2 VDC standard, 0-5 VDC available	X and Y tilt, ±2.5 VDC standard, 0-5 VDC available
<b>ANGULAR RANGE</b>	±25 degrees (50 degree span)	±50 degrees (100 degree span)	±10 degrees (20 degree span)
<b>SCALE FACTORS</b>	10 degrees/V typical	25 degrees/V typical	4 degrees/V typical
<b>LINEARITY</b>	1% over half span, 2.5% over full span typical; factory polynomials improve linearity by 10x	1.2% over half span, 7.5% of full span typical; factory polynomials improve linearity by 10x	1% of full span typical
<b>RESOLUTION</b>	0.01 degree	0.02 degree	0.005 degree
<b>REPEATABILITY</b>	0.02 degree at constant temperature	0.04 degree at constant temperature	0.01 degree at constant temperature
<b>HYSTERESIS</b>	<0.02 degree	<0.04 degree	<0.02 degree
<b>TEMPERATURE COEF.</b>	Span: +0.03%/ °C, Zero: 10-20 arc sec/ °C typical	Span: +0.03%/ °C, Zero: 10-20 arc sec/ °C typical	Span: +0.03%/ °C, Zero: 10-20 arc sec/ °C typical
<b>TIME CONSTANT, T</b>	150 msec; output is proportional to $1 - e^{-t/T} - 0.001e^{-t/5000T}$ where t = time in seconds		
<b>NATURAL FREQUENCY</b>	10 Hz		
<b>OUTPUT IMPEDANCE</b>	270 ohms, short circuit protected		
<b>POWER REQ'TS.</b>	+8 to +24 VDC (bipolar output version) or +10.5 to +26.5 VDC (0-5 V output version) @ 7 mA, 250 mV ripple max., reverse polarity protected		
<b>ENVIRONMENTAL</b>	-40° to +85°C operating and storage, 0-90% humidity, noncondensing		
<b>DIMENSIONS</b>	See drawing		
<b>WEIGHT</b>	0.5 oz (15 g)		
<b>MATERIALS</b>	Liquid-filled glass sensor, fiberglass PC board		
<b>TEMPERATURE OPTION</b>	0.1°C/mV, ±0.75° C accuracy; 0°C = 0 mV (bipolar output version), 0°C = 2.5 V (0-5 V output version)		



Model 902 and 902-45 Biaxial Clinometers (vertical mounting)

**ORDER CODES:**



environmental systems & services  
8 River Street, Richmond VIC 3121 Australia  
T + 61 3 8420 8999 | F + 61 3 8420 8900  
geotechnical@esands.com | [www.esands.com](http://www.esands.com)

