

# Model A701-2A/B(4X)

## IP65 Weatherproof Platform Tiltmeter

The model A701-2(4X) Weatherproof Platform Tiltmeter is a precision analog tiltmeter with resolution to 1  $\mu$ radian or better. Units are rated IP65 waterproof for use in wet, humid, and corrosive environments, and easily install on any horizontal surface via three built-in invar leveling legs. Output is a stable  $\pm 8$  DC voltage ( $\pm 16$  VDC differential), and the powerful internal electronics will drive cables over 1000m. Use this precision tiltmeter for volcano monitoring, geotechnical engineering, structural monitoring, platform leveling, and any application where advanced protection from weather is required.



	A701-2A(4X) (High-gain)	A701-2B(4X) (Mid-Range)
Angular Range	$\pm 8000 \mu\text{radians} (\pm 0.46^\circ)$	$\pm 4.0$
Scale Factor	1 $\mu\text{radian/mV}$	0.5 $^\circ/\text{V}$
Resolution	<1 $\mu\text{radian}$	1 $\mu\text{radian}$
Repeatability	2 $\mu\text{radians}$ (static)	2 $\mu\text{radians}$ (static)
Non-Linearity	1%	2%
Time Constant	0.15 sec	
Kz Temp Coefficient (bias/ $^\circ\text{C}$ )	$\pm 4 \mu\text{radians}/^\circ\text{C}$ (typical)	
Ks Temp Coefficient (%/ $^\circ\text{C}$ )	0.04%/ $^\circ\text{C}$ (typical)	
Output	$\pm 8\text{VDC}$ (single ended); $\pm 16\text{VDC}$ (differential)	
Channels	X-tilt, Y-tilt, Temperature	
Output Impedance	270 ohms	
Temperature Output	0.1 $^\circ\text{C/mV}$ typical (single ended; 0 $^\circ\text{C}$ = 0mV)	
Power	$\pm 11$ to $\pm 15$ VDC @ +11 and -6mA, 250 mV ripple max, reverse polarity protected	
Environmental	-25 to +70 $^\circ\text{C}$ operation; -30 to +100 $^\circ\text{C}$ storage, IP65 (NEMA 4X)	
Dimensions	6 x 6 x 4 inches (15 x 15 x 10 cm), 3 lb (1.4 kg)	
Materials	Anodized and painted aluminum	
Cable	3m (10 ft) multiconductor cable + overall shield, PVC Jacket, connectors included	

*Specifications subject to change without notice on account of continued product development*

### Ordering Code

A701-2   (4X)

A: High Gain ( $\pm 0.46^\circ$ )  
B: Mid Range ( $\pm 4^\circ$ )

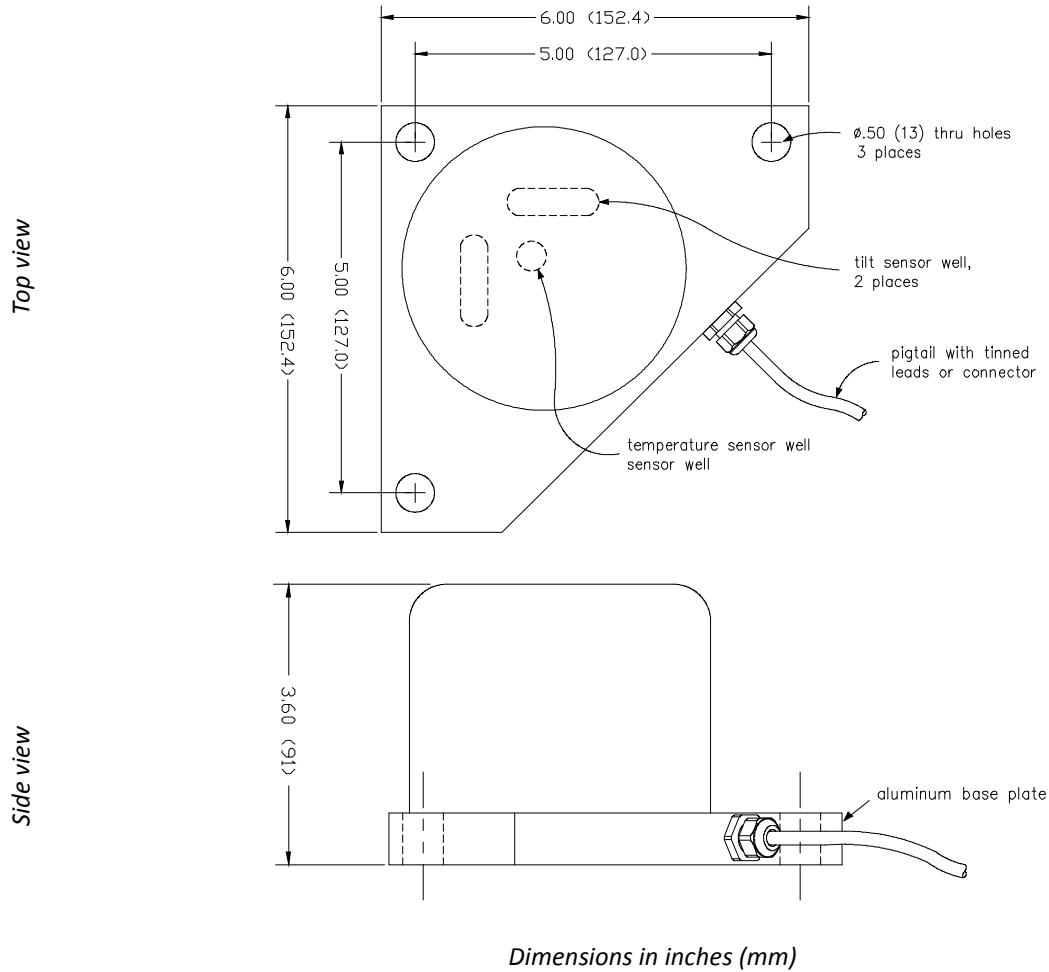
### Accessories

Part No.	Description
70304	Power/signal cable, 10-conductor (specify total length on order)
62301	Female panel receptacle (mates to 62302 connector included with tiltmeter)
62304	Extra female in-line receptacle (one included with tiltmeter)

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### Dimensions:



### Wiring/Pin-out:

Wire Color	Function	Bendix Connector
Red	+12 to +15V Power	H
Black	Power Ground	A
Violet	-12 to -15V Power	B
Blue	+Y-tilt out	G
Brown	-Y-tilt out	K
Gray	-X-tilt out	J
Green	+X-tilt out	C
White	Signal ground	E
Yellow	Temperature out	D