



Model 711-2, 716-2

The model 711-2 (floor-mount), and 716-2 (wall-mount) bolt or clamp to any surface, and are well suited for areas with heavy traffic or vibration. Electronic performance is identical to the model 701-2. Units include two switchable gains and two low-pass filter settings, and are sensitive to <0.1 urad. Output is a stable ± 8 DC voltage (± 16 VDC differential).



Applications include volcano monitoring, high-precision geotechnical engineering, bridge deflection monitoring, precision metrology, radar platform leveling, and high-accuracy tilt monitoring applications where bolt-on installations are required.

Specification

		Type-A version (High-Gain)	Type-B version (Mid-Range)
Angular Range	High-Gain:	± 800 μ radians ($\pm 0.046^\circ$)	$\pm 0.8^\circ$
	Low-Gain:	± 8000 μ radians ($\pm 0.46^\circ$)	$\pm 8.0^\circ$
Scale Factor	High-Gain:	± 0.1 μ radian/mV	$0.1^\circ/V$
	Low-Gain:	1 μ radian/mV	$1^\circ/V$
Non-Linearity	High-Gain:	0.2%	0.2%
	Low-Gain:	2%	1.5%
Resolution		0.1 μ radians	1.0 μ radians
Repeatability		1 μ radians (static)	2 μ radians (static)
Time Constant		Filter on: 7.5 sec; Filter off 0.5 sec	Filter on: 7.5 sec; Filter off 0.4 sec
Kz Temp Coefficient (deg/C)		± 3 μ radians/ $^\circ$ C (typical)	$\pm 0.001^\circ/^\circ$ C (typical)
Ks Temp Coefficient (%/ $^\circ$ C)		0.05%/ $^\circ$ C (typical)	
Output		± 8 VDC (single ended); ± 16 VDC (differential)	
Channels		X-tilt, Y-tilt, Temperature	
Output Impedance		270 ohms	
Temperature Output		0.1 $^\circ$ C/mV typical (single ended; 0 $^\circ$ C = 0mV)	
Power		± 11 to ± 15 VDC @ ± 11 and -6 mA, 250 mV ripple max, reverse polarity protected	
Environmental		-25 to $+70^\circ$ C operation; -30 to $+100^\circ$ C storage	
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) multi-conductor cable + overall shield, PVC jacket, connectors included	

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

Order Code

Floor-mount Version

711-2	A: High Gain ($\pm 0.46^\circ$) 2 Gains, 2 Filters
	B: Mid Range ($\pm 8^\circ$) 2 Gains, 2 Filters

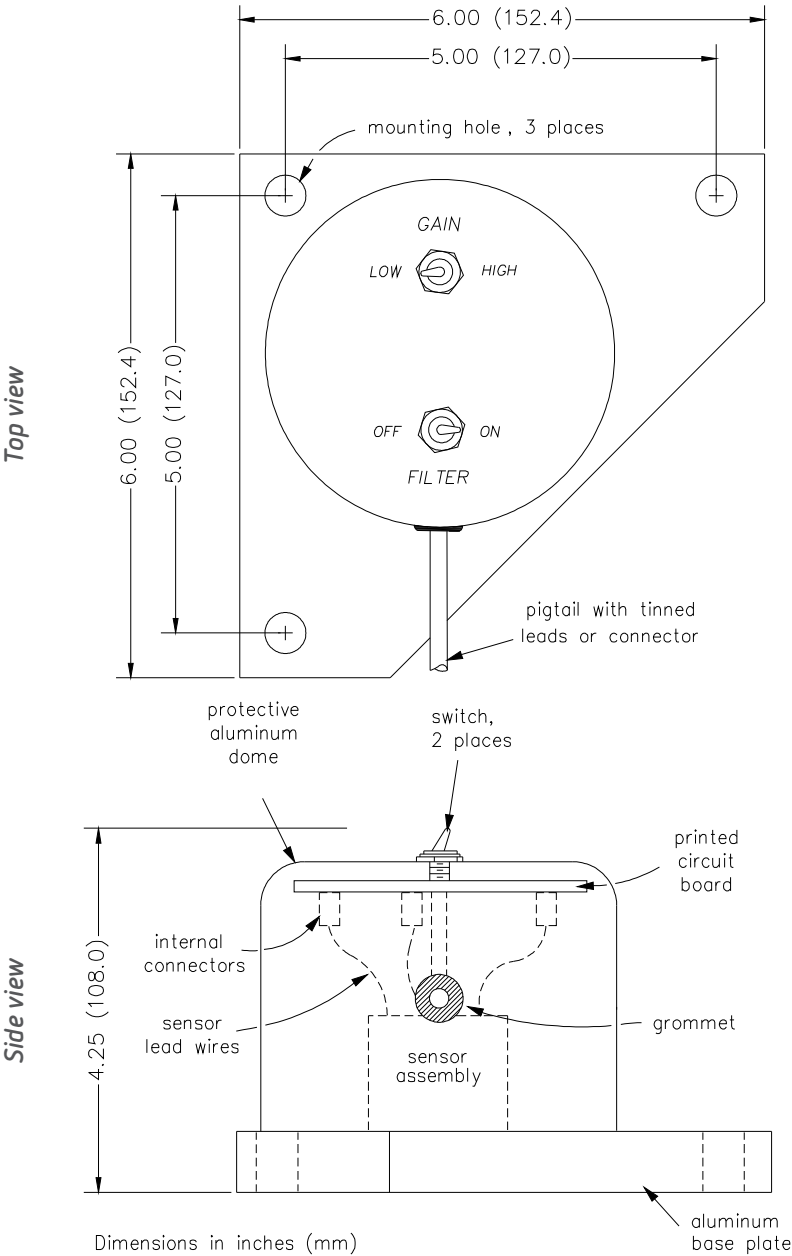
Wall-mount Version

716-2	A: High Gain ($\pm 0.46^\circ$) 2 Gains, 2 Filters
	B: Mid Range ($\pm 8^\circ$) 2 Gains, 2 Filters

Accessories

Part No.	Description
70304	Power/signal cable, 10-conductor (specify total length on order)
62301	Female panel receptacle (mates to 62302 tiltmeter connector)
62304	Extra female in-line receptacle (one included with tiltmeter)
719-AL	Vertical mounting bracket (L-bracket)
718-AL	Mounting plate (speeds installation)

■ 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