

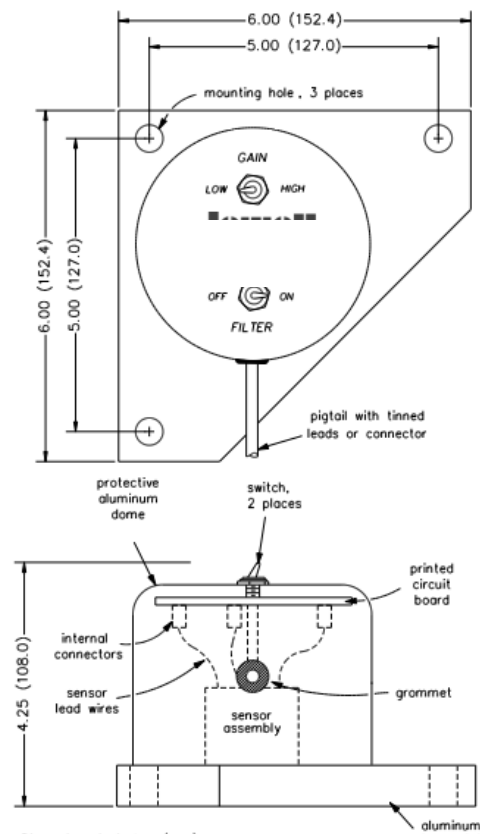
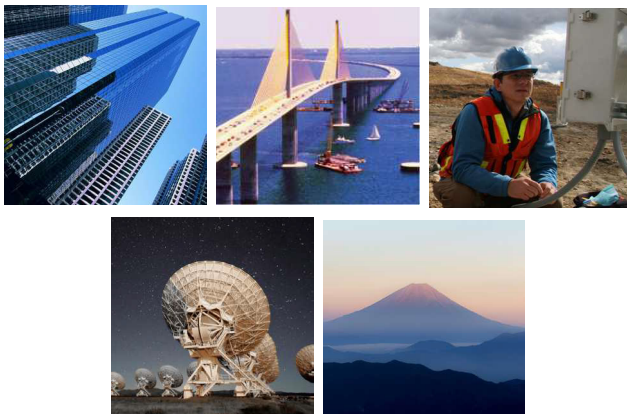


700 SERIES | A711-2, A716-2

Floor-mount & Wall-mount Tiltmeter

The model A711-2 (floor-mount), and A716-2 (wall-mount) bolt or clamp to any surface. Electronic performance is identical to the model A701-2. 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.



APPLICATIONS

- Volcano monitoring
- Geotechnical engineering
- Bridge deflection monitoring
- Precision metrology
- Radar platform leveling



PERFORMANCE

VERSION		Type-A (High-Gain)	Type B (Mid-Range)
LINEAR RANGE (*) ¹	HIGH-GAIN: LOW-GAIN:	$\pm 0.046^\circ$ $\pm 0.46^\circ$	$\pm 0.8^\circ$ $\pm 8.0^\circ$
SCALE FACTOR	HIGH-GAIN: LOW-GAIN:	0.1 μ radian/mV 1 μ radian/mV	0.1 $^\circ$ /V 1 $^\circ$ /V
NONLINEARITY (%FRO) ² max	HIGH-GAIN: LOW-GAIN:	0.2% 2%	0.2% 1.5%
NONREPEATABILITY		1 μ radians (static)	2 μ radians (static)
RESOLUTION		0.1 μ radians	1.0 μ radians
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 ($^\circ$ /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	

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	2
OUTPUT IMPEDANCE (Ohms, nominal)	270
TEMPERATURE OUTPUT	0.1 $^\circ$ C/mV typical (single ended; 0 $^\circ$ C = 0mV)
POWER	± 11 to ± 15 VDC @ +11 and -6mA, 250 mV ripple max, reverse polarity protected
OPERATING TEMPERATURE RANGE	-25 $^\circ$ to +70 $^\circ$ C
STORAGE TEMPERATURE RANGE	-30 $^\circ$ to +100 $^\circ$ C
WEIGHT	3 lb (1.4 kg)
MATERIALS	Anodized and painted aluminum
CABLE	3m (10 ft) multiconductor cable + overall shield, PVC jacket, connectors included

PIN OUT

CONNECTOR	FUNCTION
RED	+12 TO +15V PWR
BLACK	PWR GND
VIOLET	-12 TO -15V POWER
BLUE	+Y-TILT OUT
BROWN	-Y-TILT OUT
GRAY	-X-TILT OUT
GREEN	+X-TILT OUT
WHITE	SIG GND
YELLOW	TEMP OUT

NOTES:

1. Custom ranges available on request
2. 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

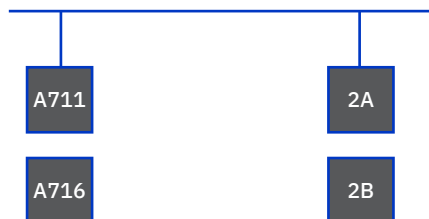


ORDERING INFORMATION

HOW TO ORDER

Model Numbers are comprised of the series, the number of axes, and the angular range.

SERIES - VERSION



MODEL #	PART #
A711-2A	98711-01-ROHS
A711-2B	98711-02-ROHS
A716-2A	98025-01-ROHS
A716-2B	98025-02-ROHS

ACCESSORIES

PART #	DESCRIPTION
01456	Compact Mounting Plate for Model 711 Type Tiltmeters, 6.0 x 7.5 x 0.375 inches
01224-01	Horizontal Mounting Plate for Model 711 Type Tiltmeters, 8.5 x 9.0 x 0.5 inches
01157-01	Vertical Mounting Bracket for Model 711 Type Tiltmeters, Lbracket style
70304	Power/Signal Cable, 10-conductor, 24 AWG, Polypropylene Jacket: 500, 700 & 800 Series Dual Axis Tiltmeters, price per ft.