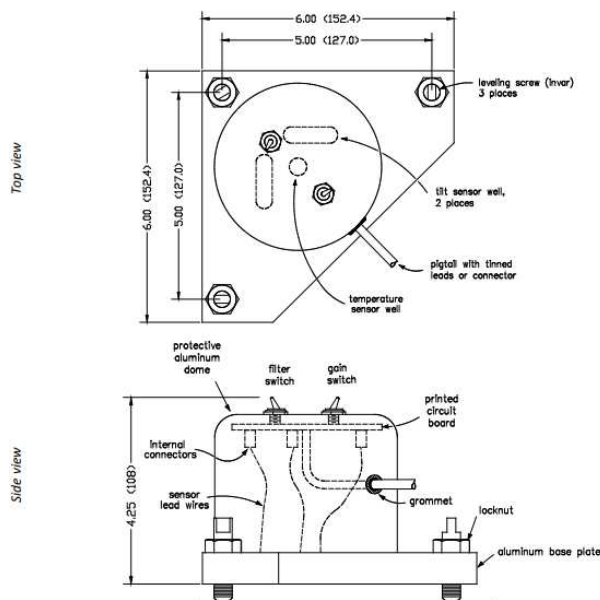
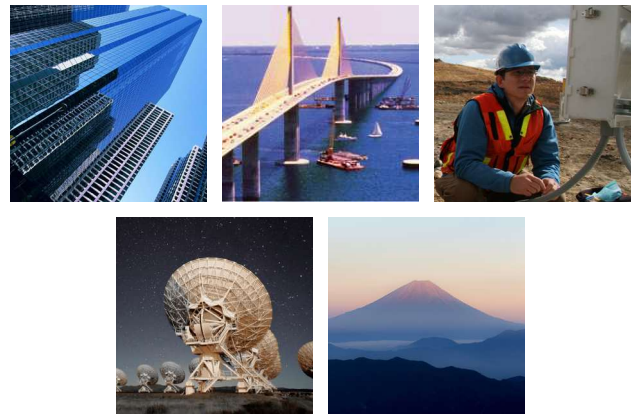


A701-2A/2B (4X)

IP65 Weatherproof Platform Tiltmeter

The model A701-2(4X) Weatherproof Platform Tiltmeter is a precision analog tiltmeter with resolution to 1 μ 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 ± 8 DC voltage (± 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.



Dimensions: in [mm]

APPLICATIONS:

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

PERFORMANCE SPECIFICATIONS

PERFORMANCE

VERSION	A701-2A(4X) (High-Gain)	A701-2B(4X) (Mid-Range)
ANGULAR RANGE (°) ¹	±8000 μradians (±0.46°)	±4.0
SCALE FACTOR	1 μradian/mV	0.5°/V
NONLINEARITY (%FRO) ² max	1%	2%
NONREPEATABILITY	1 μradians (static)	2 μradians (static)
RESOLUTION	<1 μradian	1.0 μradians
TIME CONSTANT	0.15 sec	
K _z TEMP COEFFICIENT (°/°C)	±4 μradians/°C (typical)	
K _s TEMP COEFFICIENT (%/°C)	0.04%/°C (typical)	
OUTPUT	±8VDC (single ended); ±16VDC (differential)	
CHANNELS	X-tilt, Y-tilt, Temperature	

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	2
OUTPUT IMPEDANCE (Ohms, nominal)	270
TEMPERATURE OUTPUT	0.1°C/mV typical (single ended; 0°C = 0mV)
POWER	±11 to ±15 VDC @ +11 and -6mA, 250 mV ripple max, reverse polarity protected
OPERATING TEMPERATURE RANGE	-25° to +70°C
STORAGE TEMPERATURE RANGE	-30° to +100°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

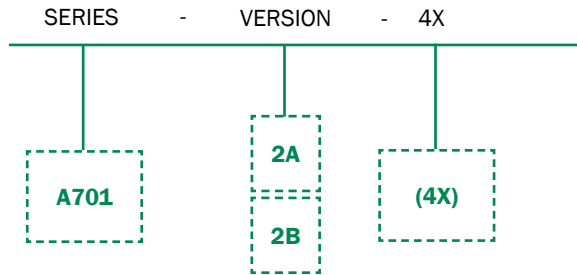
NOTES:

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.



MODEL #	PART #
A701-2A(4X)	98017-01-ROHS
A701-2B(4X)	98017-02-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, L-bracket style
70304	Power/Signal Cable, 10-conductor, 24 AWG, Polypropylene Jacket: 500, 700 & 800 Series Dual Axis Tiltmeters, price per ft.
89062	Extra RS422 Test Cable, 6-ft (1.8 m) for use with D701 and D711 Digital Tiltmeters
89063	Extra RS232 Test Cable, 6-ft (1.8 m) for use with D701 and D711 Digital Tiltmeters
00254-02	Transformer, 100-240 VAC to 12VDC, Single-ended, for Analog and Digital Tiltmeters

850 Perimeter Road Manchester, NH 03103 USA

SENSORS: 800.227.5955

www.jewellinstruments.com | sensors@jewellinstruments.com

© Jewell Instruments 2020

Jewell
Instruments

ISO9001
CERTIFIED