

Model 701-2(4X) Platform Tiltmeter

(Biaxial)

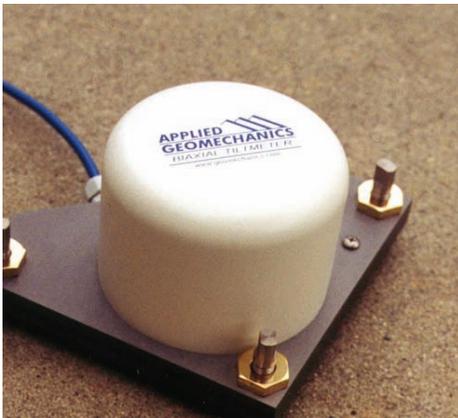
This precision biaxial tiltmeter is a weather-proof version of our popular Model 701-2 Platform Tiltmeter. Its NEMA 4X designation (IP65 for our international customers) means that it is unaffected by continuous exposure to moisture and wet weather. Also, its anodized aluminum and epoxy-coated housing

resists corrosion that can occur on the side of a volcano or wherever it is operated. With its adjustable invar legs, you can install and level Model 701-2(4X) within minutes. The tiltmeter also measures temperature, and the internal electronics will drive tilt and temperature signals over cable lengths greater than 1000m.

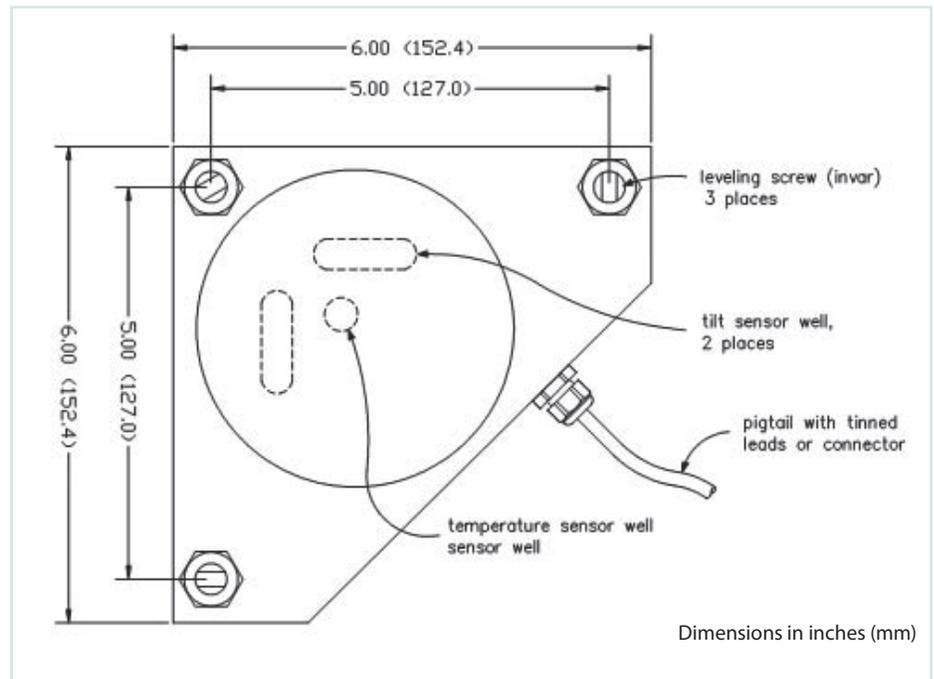


WEATHERPROOF

Applications for Model 701-2(4X) include volcano monitoring; telescope, antenna and platform leveling; structural testing and monitoring; and any other demanding application that requires top performance under harsh operating conditions.



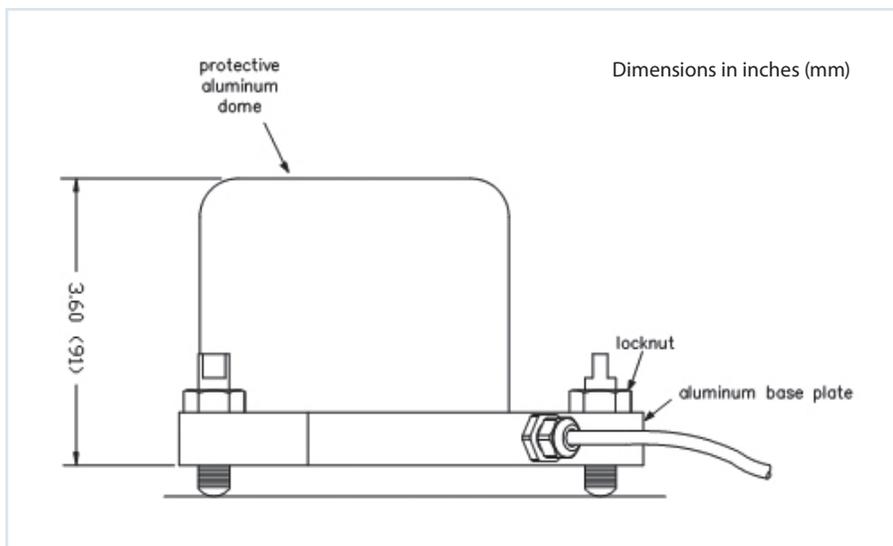
Model 701-2(4X) Weatherproof Platform Tiltmeter



Top View Platform Tiltmeter Model 701-2 (4X)

	MODEL 701-2A HIGH-GAIN VERSION	MODEL 701-2B MID-RANGE VERSION
ANGULAR RANGE	±8000 μradians* (±0.46 degree)	±4 degrees
SCALE FACTOR†	1 μradian/mV	0.5 degree/Volt
RESOLUTION	1 μradian or better	1 μradian or better
REPEATABILITY	2 μradian (static)	2 μradians (static)
LINEARITY	1% of full span	2% of full span typical
TIME CONSTANT	0.15 second	0.15 second
TEMPERATURE COEFFICIENT	Scale factor: KS = +0.04%/°C typical Zero shift: KZ = ±4 μradians/°C typical	KS = +0.04%/°C typical KZ = ±4 μradians /°C typical
TILT OUTPUT	Each axis: ±8 Volts DC (single-ended) and ±16 Volts DC (differential)	
TEMPERATURE OUTPUT	0.1°C/mV (single-ended), -40° to +100°C, ±0.75°C accuracy, 0°C = 0 mV	
OUTPUT IMPEDANCE	270 Ohms, short circuit and surge protected	
POWER REQ'TS.	±11 to ±15 VDC @ +11 and -6 mA, 250 mV peak-to-peak ripple maximum, reverse polarity protected	
ENVIRONMENTAL	-25° to +70° C operation, -30° to +100° C storage; Rated NEMA 4X (IP65) for continuous operation at 100% humidity, Withstands exposure to rainfall and spray	
MOUNTING	Tiltmeter stands on three adjustable invar legs	
MATERIALS	Anodized and epoxy-coated aluminum, invar legs, brass nuts	
CABLE	3m (10 ft) multiconductor cable + overall shield, PVC jacket, connectors included	
SIZE & WEIGHT	152 x 152 x 102 mm (6 x 6 x 4 inches), 1.4 kg (3 lb)	

* 1 degree = 3600 arc seconds = 17453 μradians (microradians) † Single-ended outputs; divide by 2 for differential scale factors.



Side View Platform Tiltmeter Model 701-2 (4X)

ORDER CODES:

Model 701-2A High-Gain Version
Model 701-2B Mid-Range Version

USEFUL ACCESSORIES:

70304 Additional cable, please specify length
62301 Female panel receptacle
(mates to P/N 62302 connector on tiltmeter cable)
62304 Extra female in-line receptacle (one is included with tiltmeter)
Model 771 Digital Readout Unit



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