

711-2(4X) Weatherproof Floor Mount Tiltmeter

(Biaxial)

This precision instrument is a weatherproof version of our popular Model 711-2 Floor Mount Tiltmeter. Its NEMA 4X designation (IP65) means that it is unaffected by continuous exposure to moisture and wet weather,

and that it resists corrosion that can occur in wet conditions. The tiltmeter also measures temperature, and the internal electronics will drive tilt and temperature signals over cable lengths greater than 1000m.

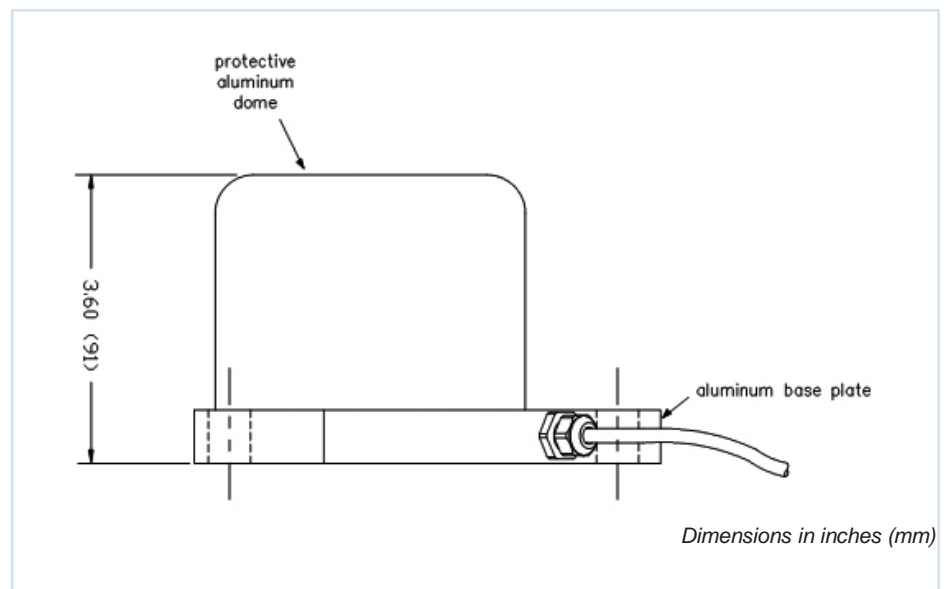


WEATHERPROOF PRECISION

Model 711-2(4X) bolts or clamps to any surface and is well suited for areas of heavy traffic or vibration. The 12.7-mm (0.5-inch) holes in its three corners fit over threaded stainless steel studs, provided with each order. The tiltmeter is double-nutted to the studs after they are anchored in the mounting surface. Applications include volcano monitoring, precise alignment of telescopes and antennae, monitoring of large structures, and all jobs demanding top performance under harsh operating conditions.



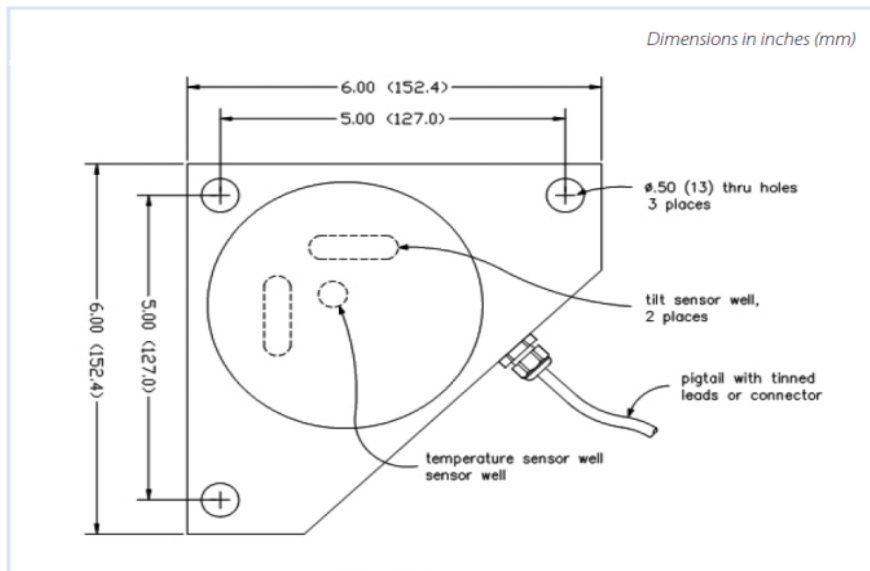
Model 711-2 (4X) Weatherproof Platform Tiltmeter



Side View Model 711-2 (4X) Weatherproof Platform Tiltmeter

	MODELS 711-2A(4X) HIGH-GAIN VERSION	MODELS 711-2B(4X) MID-RANGE VERSION	MODELS 711-2C(4X) WIDE-ANGLE VERSION
ANGULAR RANGE	±8000 μradians* (±0.46 degree)	±4 degrees	±80 degrees
SCALE FACTORS	1 μradian/mV	0.5 degree/Volt	10 degrees/Volt
RESOLUTION	1 μradian	1 μradian	2 arc seconds
REPEATABILITY	2 μradian (static)	2 μradians (static)	4 arc seconds (static)
LINEARITY	1% of full span	2% of full span typical	4% of full span, 1% of half span
TIME CONSTANTS	0.15 second	0.15 second	0.2 second
TEMPERATURE COEF.	Scale factor: KS = +0.04%/°C typ. Zero shift: KZ = ±4 μradians/°C typ.	KS = +0.04%/°C typical KZ = ±4 μradians/°C typical	KS = +0.13%/°C typical KZ = ±0.004 degree/°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	Three 0.5-inch (12.7 mm) mounting holes; tiltmeter fastens to stainless steel mounting studs (included)		
MATERIALS	Anodized and painted aluminum		
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.



Top View Model 711-2 (4x) Platform Tiltmeter

ORDER CODES:

Model 711-2A(4X) Weatherproof Floor Mount Tiltmeter, High-Gain
Model 711-2B(4X) Weatherproof Floor Mount Tiltmeter, Mid-Range
Model 711-2C(4X) Weatherproof Floor Mount Tiltmeter, Wide-Angle

USEFUL ACCESSORIES:

70304 Additional cable, please specify length
62301 Female panel receptacle (mates to P/N 62302 connector on tiltmeter cable)
62304 Female in-line receptacle (one is included with tiltmeter)
84039 Ready-made extension cable with connectors on both ends, please specify length
Model 718-AL Mounting plate, 8.5 x 9 in (216 x 229 mm); speeds installation
Model 719-AL Universal mounting bracket, attaches Model 711-2(4X) to vertical surface
84410 Extra mounting stud assembly, specify quantity required
Model 771 Digital Readout Unit