

# Model D711 Floor Mount Tiltmeter

(Biaxial)

Model D711 continues the legacy of 700-Series pre-cision biaxial tiltmeters. 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. RS232 and RS485

output versions are both available. The powerful firmware command set enables the user to control output data rates, data formats, sample averaging, and other useful parameters. All units are shipped with our graphical ZAGI user in-terface software for Windows computers.



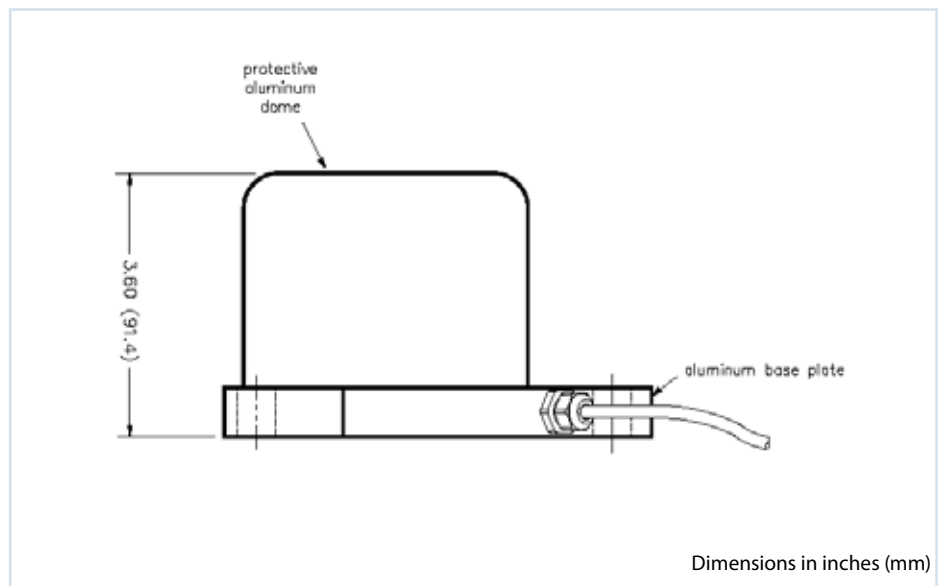
## UNAFFECTED BY MOISTURE AND WET WEATHER

Model D711 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 sur-face.

Each tiltmeter comes with a hookup cable and power supply for quick operation using your PC.



Model 711-2 (4X) Weatherproof Platform Tiltmeter

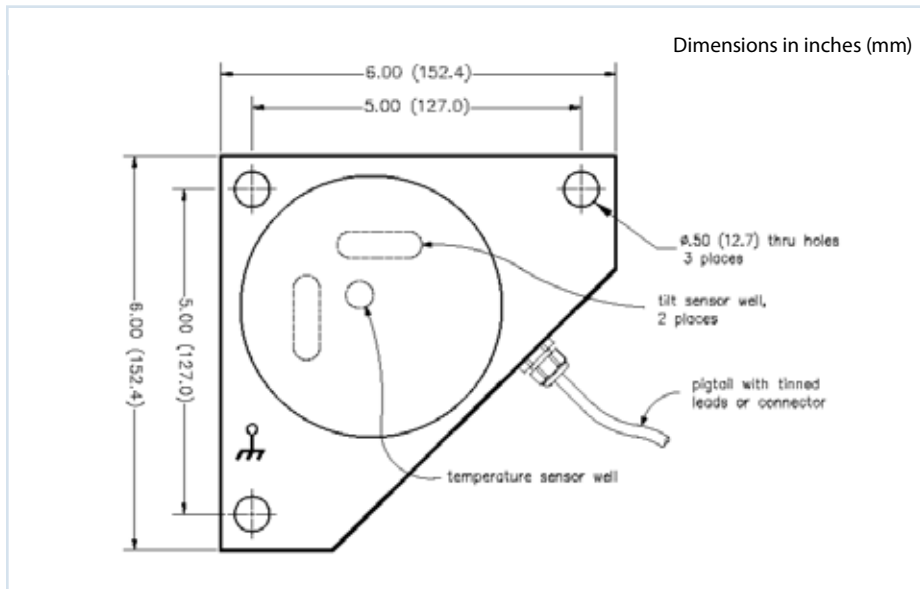


Dimensions in inches (mm)

Side View Model D711 Digital Floor Mount Tiltmeter

	MODEL D711-A HIGH-GAIN	MODEL D711-B MID-RANGE	MODEL D711-C WIDE-ANGLE
ANGULAR RANGE	±0.5 degree*	±5 degrees	±80 degrees
RESOLUTION	1 μradian	10 μradians	4 arc seconds
REPEATABILITY	< 4 μradians (static)	10 μradians (static)	4 arc seconds (static)
LINEARITY	0.4% of full span	0.1% of full span	0.1% of full span
TEMPERATURE COEF.	Zero, Kz = ±3.5 μradians/°C typical; Span, Ks = 0.02%/°C typ.		Kz = ±0.004 degree/°C typical
TIME CONSTANT	0.15 second		
POWER REQ'TS	Two orthogonal tilt angles plus one temperature; RS232 or RS485 (RS422), transmit and receive Baud rate: 9600 (default), 19200, 28800, 57600, 115200, 230400 Formats: NMEA XDR, Trimble proprietary, Ashtech compatible, Simple (x, y, temperature, serial no.)		
OUTPUT DATA RATE	User-selectable from 10 samples/second to 1 sample/24 hours		
RS485 TERMINATION	Cable length < 12m: No termination resistors; Cable length > 12m: 100-130Ω termination resistors		
POWER REQ'TS	7 to 28 VDC @ 27 mA, 250 mV peak-to-peak ripple maximum, reverse polarity protected		
ENVIRONMENTAL	-25° to +70°C operational, -30° to +100°C storage. Rated NEMA 4X (IP65) for continuous operation at 100% humidity. Withstands exposure to rainfall and spray. Not submersible.		
MOUNTING	Three 0.5-inch (12.7 mm) diameter mounting holes. Tiltmeter fastens to stainless steel mounting studs (included).		
MATERIALS	Anodized and painted aluminum		
CABLE	10 ft (3m) multiconductor cable + overall shield, PVC jacket, connectors included		
SIZE & WEIGHT	6 x 6 x 4 inches (152 x 152 x 102 mm), 3 lb (1.4 kg)		

\* 1 degree = 3600 arc seconds = 17453 μradians (microradians)



Top View Model D711 Digital Floor Mount Tiltmeter

#### ORDER CODES:

#### USEFUL ACCESSORIES:

- 98005-01 D711-A Weatherproof Digital Floor Mount Tiltmeter, High-Gain, Biaxial, RS232
- 98005-02 D711-B Weatherproof Digital Floor Mount Tiltmeter, Mid-Range, Biaxial, RS232
- 98005-03 D711-A Weatherproof Digital Floor Mount Tiltmeter, High-Gain, Biaxial, RS485
- 98005-04 D711-B Weatherproof Digital Floor Mount Tiltmeter, Mid-Range, Biaxial, RS485
- 98005-05 D711-C Weatherproof Digital Floor Mount Tiltmeter, Wide-Angle, Biaxial, RS232
- 98005-06 D711-C Weatherproof Digital Floor Mount Tiltmeter, Wide-Angle, Biaxial, RS485
- 70304 Additional cable, please specify length
- 62401 Extra female panel receptacle (mates to P/N 62402 connector on tiltmeter cable, one is included with tiltmeter)
- Model 718-AL Mounting plate, 8.5 x 9 in (216 x 229 mm); speeds horizontal installation
- Model 719-AL Universal mounting bracket, attaches Model D711 to vertical surface
- 84410 Extra mounting stud assembly, specify quantity required



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