## Model D711 Floor Mount Tiltmeter

(Biaxial)

Model D711 continues the legacy of 700-Series precision 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 RS422 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 interface software for Windows computers.



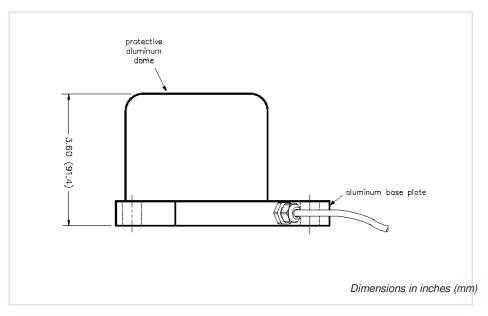
## UNAFFECTED BY MOISTURE AND WET WEATHER

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 surface.

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



Model 711-2 (4X) Weatherproof Platform Tiltmeter

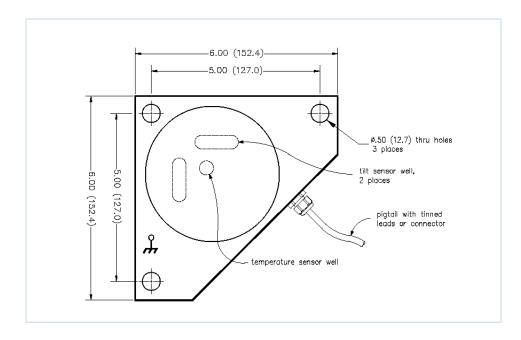


Side View Model D711 Digital Floor Mount Tiltmeter



	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 = $\pm 3.5$ µradians/°C typical; Span, Ks = $0.02\%$ /°C typ. Kz = $\pm 0.004$ degree/°C typ		
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: 100–130 $\Omega$ termination resistors		
POWER REQ'TS	7 to 28 VDC @ 27 mA, 250 mV peak-to-peak ripple maximum, reverse polarity protected		
ENVIRONMENTAL	$-25^{\circ}$ to $+70^{\circ}$ C operational, $-30^{\circ}$ to $+100^{\circ}$ 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)		

<sup>\* 1</sup> degree = 3600 arc seconds = 17453 µradians (microradians)



Top View Model D711 Digital Floor Mount Tiltmeter



USEFUL ACCESSORIES:	
98005-01	D711-A Weatherproof Digital
	Floor Mount Tiltmeter, Hi-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, RS422
98005-04	D711-B Weatherproof Digital
	Floor Mount Tiltmeter, Mid-
	Range, Biaxial, RS422
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, RS422
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
0.1110	surface
84410	Extra mounting stud assembly,
	specify quantity required

