

Model D701-A/B

Digital Platform Tiltmeter



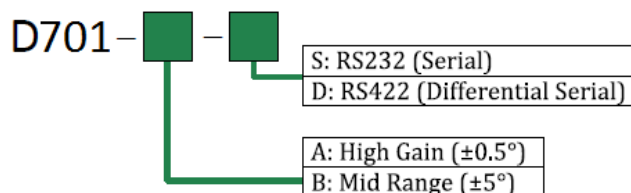
The model D701 Digital Platform Tiltmeter is a high-precision instrument with advanced firmware features. Output is RS232 or RS422 (RS485 full duplex). The D701 also includes invar leveling feet for easy installation on any horizontal surface. Using a high-precision electrolytic sensor element, units deliver up to 1 μ radian resolution with virtually zero long-term drift. Programmable firmware controls include sample averaging, auto-zero (tare), baud/output rate, temperature compensation* and more. The D701 also has on-board memory, with storage capacity up to 22,000 samples. Use the D711 for volcano monitoring, geotechnical engineering, structural monitoring, platform leveling, and more.



	D701-A (High-gain)	D701-B (Mid-Range)
Angular Range	$\pm 0.5^\circ$	$\pm 5.0^\circ$
Resolution	1 μ radian	10 μ radian
Repeatability	4 μ radians (static)	10 μ radians (static)
Non-Linearity	0.4%	0.1%
Time Constant	0.15 sec	2 sec
Kz Temp Coefficient (bias/ $^\circ$ C)	$\pm 3.5 \mu$ radians/ $^\circ$ C (typical)	
Ks Temp Coefficient (%/ $^\circ$ C)	$\pm 0.02\%$ / $^\circ$ C (typical)	
Output	RS232, RS422 (RS485 full duplex)	
Output Format	NMEA XDR, Trimble TCM, Ashtec compatible, Simple (default: X, Y, Temp., S/N)	
Baud Rate	9600 (default), 19200, 28800, 57600, 115200, 230400	
Channels	X-tilt, Y-tilt, Temperature, Serial No.	
Power	7-28 VDC @ 30mA, 250 mV ripple max, reverse polarity protected	
Environmental	-40 to +85 C operation and storage; IP65	
Dimensions	6 x 6 x 4 inches (15 x 15 x 10 cm), 3 lb (1.4 kg)	
Materials	Anodized and painted aluminum	
Cable	10 ft. (3m) multiconductor cable + overall shield, PVC jacket, connectors included	

Specifications subject to change without notice on account of continued product development

Ordering Code



Accessories

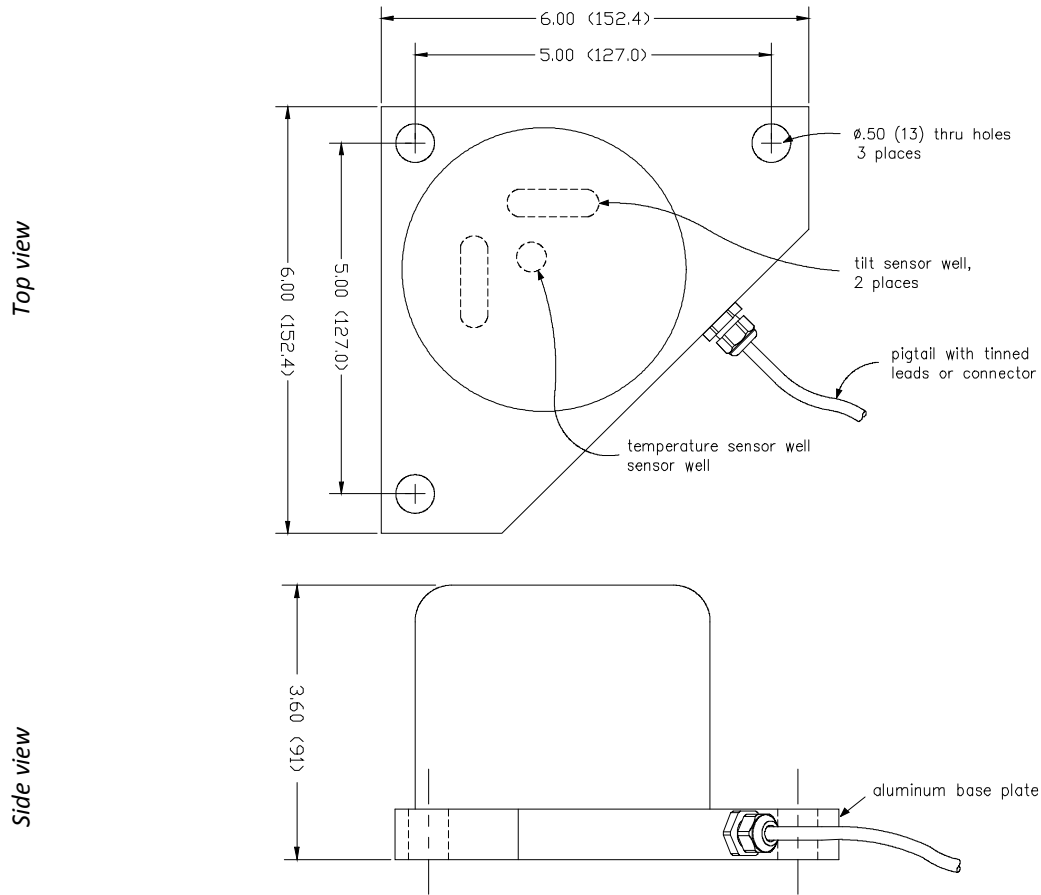
Part No.	Description
70304	Power/signal cable, 10-conductor (specify total length on order)
62401	Extra female panel receptacle (one included with tiltmeter)
719-AL	Vertical mounting bracket (L-bracket)
718-AL	Horizontal mounting plate

Model D701-A/B

Digital Platform Tiltmeter



Dimensions:



Dimensions in inches (mm)

Wiring/Pin-out:

Wire Color	Tiltmeter End		Mating Cable (Computer End)	
	Function	Connector Pin	DB9 Pin (RS422)	DB9 Pin (RS232)
Red	Power	H	---	---
Black	Ground	A	1	5
Blue	TX (RS232)	E	---	2
Green	RX (RS232)	G	---	3
Orange	TX+ (RS485)	D	4	---
Gray	TX- (RS485)	J	5	---
Yellow	RX- (RS485)	C	9	---
Brown	RX+ (RS485)	B	8	---
Drain Wire	Cable Shield	F	---	---