





700 Series | D701-A/B Digital Platform Tiltmeter

The model D701 Digital Platform Tiltmeter is a highprecision 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 µradian 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	±0.5°	±5.0°			
Resolution	1 μradian	10 µradian			
Repeatability	4 μradians (static)	10 μradians (static)			
Non-Linearity	0.4%	0.1%			
Time Constant	0.15 sec	2 sec			
Kz Temp Coefficient (bias/°C)	±3.5 μradians/°C (typical)				
Ks Temp Coefficient (%/°C)	±0.02%/°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	2401 Extra female panel receptacle (one included with tiltmeter)	
719-AL	Vertical mounting bracket (L-bracket)	
718-AL	718-AL Horizontal mounting plate	





DIMENSIONS:

Top view

Side view



Dimensions in inches (mm)

WIRING/PIN-OUT:

Tiltmeter End		Mating Cable (Computer End)		
Wire Color	Function	Connector Pin	DB9 Pin (RS422)	DB9 Pin (RS232)
Red	Power	Н		
Black	Ground	А	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)	С	9	
Brown	RX+ (RS485)	В	8	
Drain Wire	Cable Shield	F		

Page 2/2

The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification. Althen – Your expert partner in Sensors & Controls | althensensors.com

Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.

Germany/Austria/Switzerland info@althen.de **Benelux** sales@althen.nl France info@althensensors.fr Sweden info@althensensors.se USA/Canada info@althensensors.com Other countries info@althensensors.com