

A875 Mini "Tuff Tilt" Digital Tiltmeter

The model 875 Mini "Tuff Tilt" Tiltmeter combines high precision and durability in a miniaturized and economical instrument package. Using MEMS technology, the 875 delivers superior measurement accuracy with virtually no long-term drift and a resolution of 0.05°. Output options include 0.5-4.5Vdc, 4-20mA and digital RS485. All units are rated IP67 waterproof for advanced protection from the elements. Use the 875 Mini "Tuff Tilt" for structural monitoring, angle measurement and control, platform leveling, testing and research, OEM and more. This product is RoHS compliant.



Static/Dynamic				
Angular Range ¹	±5°	±15°	±30°	
Resolution	0.05°	0.05°	0.05°	
Output Voltage Range (Vdc)	0.5-4.5	0.5-4.5	0.5-4.5	
FRO Tolerance (% max)	±0.30	±0.30	±0.30	
Scale Factor (V/°)	0.4000 ±0.0012	0.1333 ±0.0004	0.0667 ±0.0002	
SF Temp Coefficient (ppm/°C, max)	±150	±150	±150	
0° Output (V max @ room temp.)	±0.03	±0.03	±0.03	
0° Temp Coefficient (V/°C max)	±0.005	±0.005	±0.005	
Non-linearity (% FRO max)	2	2	2	
Nonrepeatability (° max)	0.002	0.002	0.002	
Transverse Axis Misalignment (° max)	±1	±1	±1	
Relative Accuracy (° max)	0.10	0.16	0.30	
Bandwidth (Hz nom) (-3 dB)	<1	<1	<1	
Start Up Time (Seconds max)	5	5	5	
Response Time (Seconds max)	0.3	0.3	0.3	

Electrical & Environmental	
Number of Axes	1 or 2
Input Voltage Range (Vdc max)	9 - 30
Input Current (mA @ 24V max)	15
Output Noise (Vrms max)	0.006
Output Impedance (Ohms nom)	10
Operating Temperature Range (°C)	-40 to +85
Storage Temperature Range (°C)	-50 to +105
Shock (g, 1 msec, ½-sine)	500
Weight (grams)	210 (7.4 oz.)
Seal	IP67
Cable	2 M (6.6 ft), flying leads

¹Custom ranges available on request product development

*Specifications subject to change without notice on account of continued

*Measurements are performed at room ambient temperature unless stated otherwise





ORDERING CODE

A875 SERIES



- Output is linear with change in degrees tilt.
- Zero Function: Short green and black wires at poweron for 3 seconds and release.
- Do not short wires in operation mode.

Wiring:			
Wire Color	Function		
Red	+Power		
Black	Ground		
Yellow	No Connection		
Blue	No Connection		
Green	Zero Cal.		
White	X-Out		
Brown	Y-Out		
Grey	No Connection		

DIMENSIONS (mm)

Model A875 Mini "Tuff Tilt" Dimensions

Units: Inch [MM] Cable Length: 6.6 ft [2 M]









HOW TO ORDER:

Model	Part Number	Description		
875-SMB	879851-01	Straight Bracket		
875-RAMB	879851-01	Right Angle Bracket		

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