

Model A801 “Tuff Tilt” Analog Tiltmeter

The model 801 “Tuff Tilt” Analog Tiltmeter combines high precision and durability in an economical instrument package. Using an absolute gravity referenced electrolytic sensor, the A801 delivers superior measurement accuracy with virtually no long-term drift, and high-gain units are sensitive to <0.0017 mm/m or better. Output is a stable ± 5 VDC voltage (± 10 VDC differential), which can be read with any VDC input datalogger. All units are rated IP65 waterproof for advanced protection from the elements. Use the A801 “Tuff Tilt” for structural monitoring, angle measurement and control, platform leveling, and more.



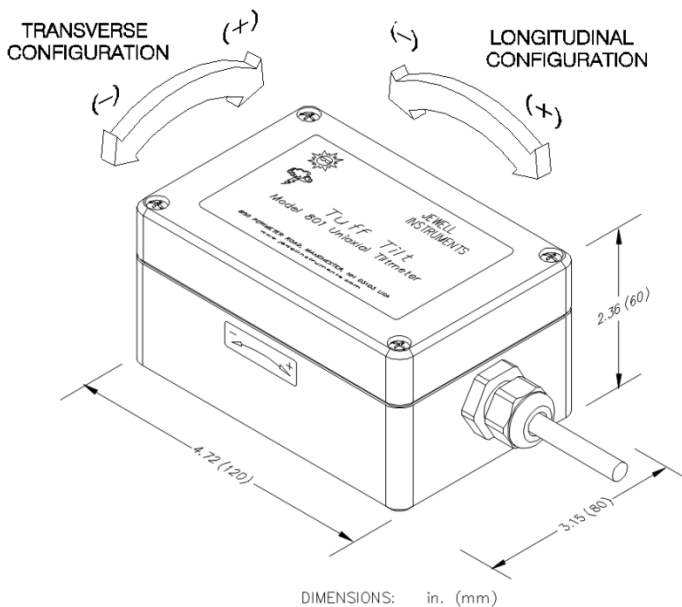
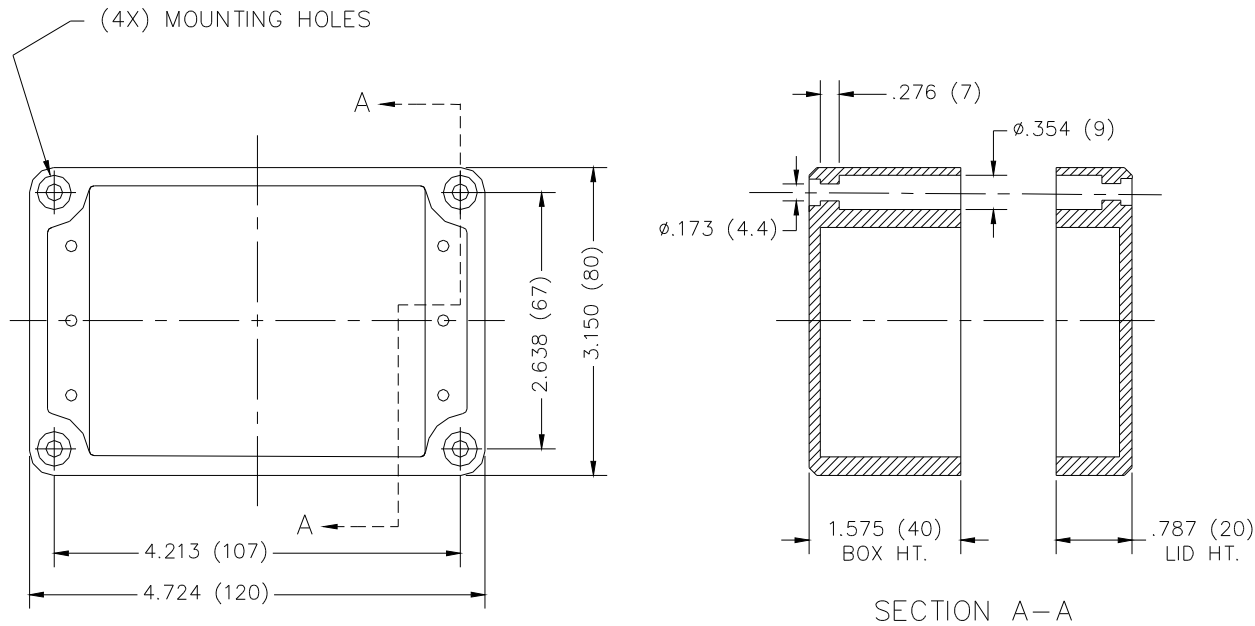
	High-Gain	Standard	Wide-Angle
Angular Range	$\pm 0.5^\circ$	$\pm 3.0^\circ$	$\pm 50^\circ$
Resolution	$< 0.0001^\circ$	0.0006°	0.01°
Repeatability	$< 0.0002^\circ$	0.001°	0.02°
Non-Linearity	1%	2%	0.5%
Scale Factor	$0.1^\circ/\text{V}$	$0.6^\circ/\text{V}$	$10^\circ/\text{V}$
Time Constant	1.75 sec (2-pole Butterworth low-pass filter)		0.15 sec
Kz Temp Coefficient ($^\circ/\text{C}$)	$\pm 0.0002^\circ/\text{C}$ (typical)		
Ks Temp Coefficient ($\%/^\circ\text{C}$)	0.02%/°C (typical)		
Output	$\pm 5\text{VDC}$ (single ended); $\pm 10\text{VDC}$ (differential)		
Channels	Tilt, Temperature		
Output Impedance	270 ohms		
Temperature Output	$0.1^\circ\text{C}/\text{mV}$ typical (single ended; $0^\circ\text{C} = 0\text{mV}$)		
Power	8-18 VDC @ 8mA, 250 mV ripple max, reverse polarity protected		
Environmental	-25 to +70 operation; -30 to +100 C storage. IP65		
Dimensions	120 x 80 x 60 mm, 0.6 kg (1.5 lb.)		
Materials	Diecast painted aluminum,		
Cable	3m (10 ft) 6 conductor + one overall shield, PVC jacket, tined ends		

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

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Model A801 “Tuff Tilt” Enclosure and Mounting Hole Dimensions



Accessories:

Part No.	Description
81439	Mounting bracket for vertical surfaces
84051	Mounting plate for horizontal surfaces
70369	Power/signal cable, 6-conductor (specify total length on order)
62204	Optional 6-pin male receptacle (installed on tiltmeter cable)
62202	Optional 6-socket in-line plug (mates to P/N 62204 connector)
870/DMM	Optional 870 Readout Module with Digital Multimeter Display

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Pin Outs

Single Axis

Color	Function
Red	+Vin
Black	Power Ground
White	Signal Ground
Green	+X
Blue	-X
Yellow	Temperature

Biaxial

Color	Function
Red	+Vin
Black	Power Ground
White	Signal Ground
Green	+X
Gray	-X
Yellow	Temperature
Blue	+Y
Brown	-Y

Ordering Code:

