

Model A603 High-Precision Platform-Mount Tiltmeter

The model A603 platform mount tiltmeter is our new model designed to fill the gap left by the obsoleted 520M. Units come with the same leveling worm-gear feet that were on the 520M. The A603 also includes two switchable gains and two low-pass filter settings. Using an absolute gravity referenced electrolytic sensor, the A603 delivers ultra-high sensitivity to <2.5 nrad with virtually zero long-term drift. Output is a stable ± 8 DC voltage (± 16 VDC differential). Rugged, reliable, and extremely accurate, the A603 is the preferred choice for volcano monitoring, high-precision geotechnical engineering, precision metrology, radar platform leveling, and high-accuracy tilt monitoring applications worldwide.



		Model A603-A (High Gain)	Model A603-C (Ultra High Gain)
Angular Range	High-Gain:	$\pm 200 \mu\text{radians} (\pm 0.0115^\circ)$	$\pm 20 \mu\text{radians} (\pm 0.00115^\circ)$
	Low-Gain:	$\pm 2000 \mu\text{radians} (\pm 0.115^\circ)$	$\pm 200 \mu\text{radians} (\pm 0.0115^\circ)$
Scale Factor	High-Gain:	25 nradian/mV	2.5 nradian/mV
	Low-Gain::	250 nradian/mV	25 nradian/mV
Non-Linearity		2.0%	
Resolution		<25 nradians	<2.5 nradians
Time Constant		Filter on: 7.5 sec; Filter off 0.5 sec	
Kz Temp Coefficient (deg/C)		$\pm 3 \mu\text{radians}/^\circ\text{C}$ (typical)	
Ks Temp Coefficient (%/°C)		0.05%/°C (typical)	
Output		± 8 VDC (single ended); ± 16 VDC (differential)	
Channels		X-tilt, Y-tilt, Temperature	
Output Impedance		270 ohms	
Temperature Output		0.1°C/mV typical (single ended; 0°C = 0mV)	
Power		± 11 to ± 15 VDC @ +11 and -6mA, 250 mV ripple max, reverse polarity protected	
Environmental		-25 to +70°C operational; -30 to +100°C storage; IP50 Seal	
Dimensions		9.25 x 9.25 x 5 inches (24 x 24 x 12.7 cm), Weight: (estimated) 10.5 lbs (2.7 kg)	
Materials		Anodized and painted aluminum dome, Stainless Steel base and hardware	

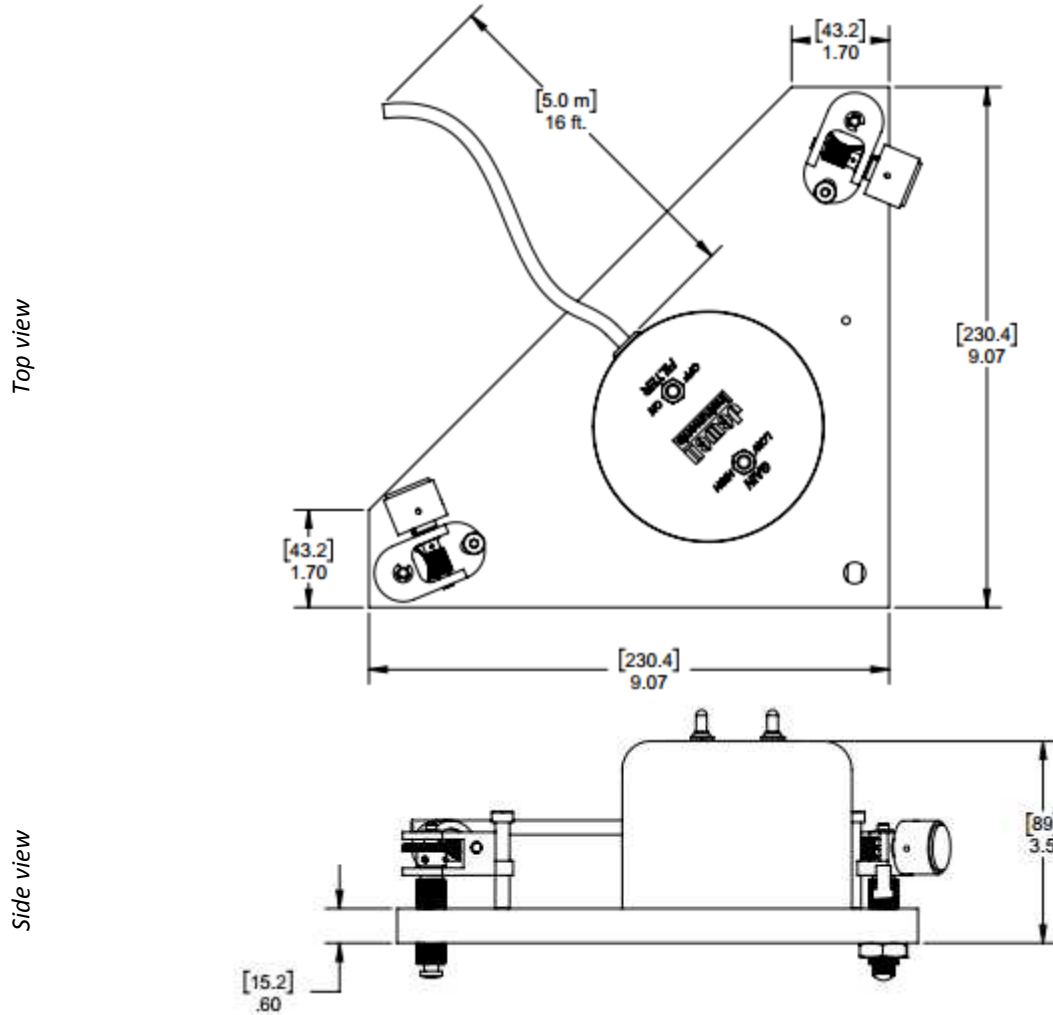
Specifications subject to change without notice on account of continued product development

Ordering Code:

A603-A "High gain" with 5 meter tethered cable
 A603-C "Ultra High Gain", with 5m tethered cable

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Dimensions:



Dimensions in inches (mm)

CABLE CONNECTIONS	
RED	+12 to +15V POWER
BLACK	POWER GROUND
VIOLET	-12 to -15V POWER
BLUE	+Y TILT OUT
BROWN	-Y TILT OUT
GRAY	-X TILT OUT
GREEN	+X TILT OUT
WHITE	SIGNAL GROUND
YELLOW	TEMPERATURE OUT

WIRING: