





## **600 Series | 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	High-Gain:	±200 μradians (±0.0115°)	± 20 μradians (±0.00115°)	
Range	Low-Gain:	±2000 μradians (±0.115°)	± 200 μradians (±0.0115°)	
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)		±3 μradians/°C (typical)		
Ks Temp Coefficient (%/°C)		0.05%/°C (typical)		
Output		±8VDC (single ended); ±16VDC (differential)		
Channels		X-tilt, Y-tilt, Temperature		
Output Impedance		270 ohms		
Temperature Output		$0.1^{\circ}$ C/mV typical (single ended; $0^{\circ}$ 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		
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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



Top view

Side view



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		
F	GREEN	+X TILT OUT		
	WHITE	SIGNAL GROUND		
	YELLOW	TEMPERATURE OUT		
RING:				

WIRING:

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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.

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