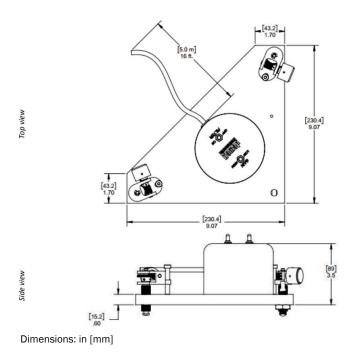
JOUISI Instruments

MAKING SENSE OUT OF MOTION

Model A603

High-Precision Platform Inclinometer

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.















APPLICATIONS:

- Volcano monitoring
- · Geotechnical engineering
- · Bridge deflection monitoring
- Precision metrology
- · Radar platform leveling



PERFORMANCE

VERSION		A603-A (High-Gain)	A603-C (Ultra-High-Gain)
ANGULAR RANGE (°) ¹	HIGH-GAIN: LOW-GAIN	±200 μradians (±0.0115°) ±2000 μradians (±0.115°)	± 20 µradians (±0.00115°) ± 200 µradians (±0.0115°)
SCALE FACTOR	HIGH-GAIN: LOW-GAIN	25 nradian/mV 250 nradian/mV	2.5 nradian/mV 25 nradian/mV
NONREPEATABILITY (° max)		<0.0002°	0.001°
NONLINEARITY (%FRO) ² max		±2.0	
RESOLUTION		<25 nradians	<2.5 nradians
TIME CONSTANT		Filter on: 7.5 sec; Filter off 0.5 sec	
Kz TEMP COEFFICIENT (°/C)		±3 μradians/°C (typical)	
Ks TEMP COEFFICIENT (%/°C)		0.05%/°C (typical)	
OUTPUT	±8VDC (single ended); ±16VDC (differe		±16VDC (differential)
CHANNELS		X-tilt, Y-tilt, Temperature	

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	2
OUTPUT IMPEDANCE (Ohms, nominal)	270
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
OPERATING TEMPERATURE RANGE	-25° to +70°C
STORAGE TEMPERATURE RANGE	-30° to +100°C
WEIGHT	10.5 lbs (2.7 kg)
MATERIALS Anodized and painted aluminum dome, Stainless Steel base	
SEAL	IP50

PIN OUT:

CONNECTOR	FUNCTION
RED	+12 TO +15V PWR
BLACK	PWR GND
VIOLET	-12 TO -15V POWER
BLUE	+Y-TILT OUT
BROWN	-Y-TILT OUT
GRAY	-X-TILT OUT
GREEN	+X-TILT OUT
WHITE	SIG GND
YELLOW	TEMP OUT

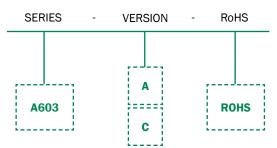
NOTES:

- Custom ranges available on request
- Nonlinearity is specified as deviation of output referenced to theoretical sine function value, independent of misalignment

Specifications are subject to change without notice due to continued product development



HOW TO ORDER Model Numbers are comprised of the series, the number of axes, and the angular range.



MODEL #	PART #
A603-A-ROHS	98603-01-ROHS
A603-C-ROHS	98603-03-ROHS

Accessories:

PART #	DESCRIPTION
70304	Power/Signal Cable, 10-Conductor, 24 AWG, Polypropylene Jacket: 500, 700, & 800 Series Dual Axis Tiltmeters, price/ft.
62301	Female Panel Receptacle (Mates to PN: 62302 Connector which is included with the tiltmeter)
62304	Extra Female In-line Receptacle (Which is included with the tiltmeter).

