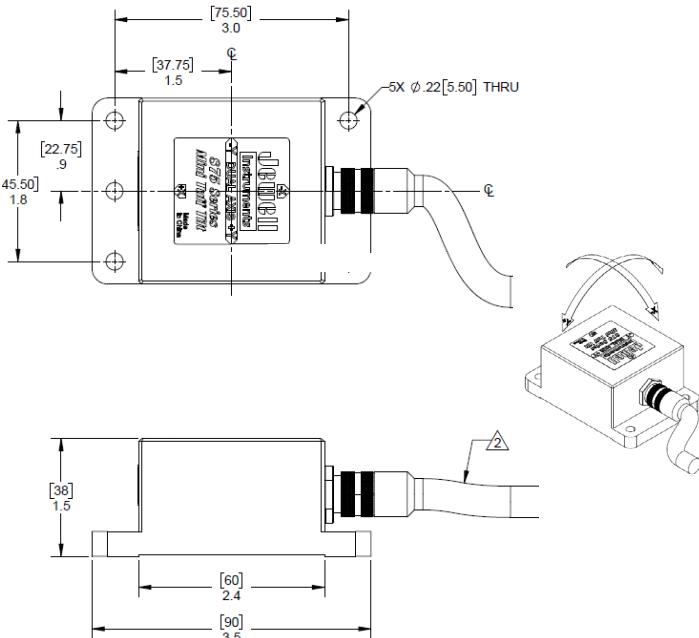


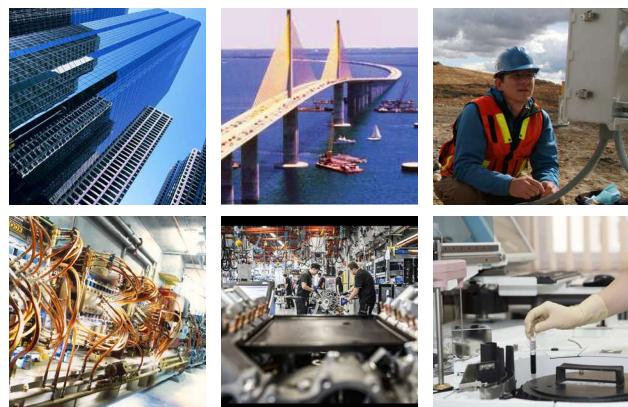
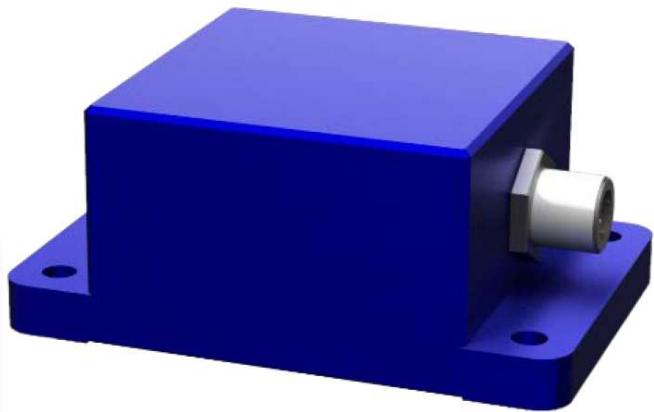
Model A875

Analog MEMS Tiltmeter

The model 875 MEMS 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 A875 for structural monitoring, angle measurement and control, platform leveling, testing and research, OEM and more. This product is RoHS compliant.



Dimensions: in [mm]



APPLICATIONS:

- Structural Monitoring
- Platform Leveling
- Laboratory Testing
- Angle Measurement
- Educational Research
- OEM

PIN OUT:

WIRE COLOR	OUTPUT OPTIONS			
	0.5-4.5V	4-20MA	RS485	RS232
BROWN			+PWR	
BLACK			GND	
BLUE	X OUT	X OUT	D+(A)	TXD
WHITE	Y OUT	Y OUT	D-(B)	RXD
GREY	ZERO CAL	ZERO CAL	NC	ZERO CAL

PERFORMANCE SPECIFICATIONS: A875

PERFORMANCE

ANGULAR RANGE (°) ¹	±5°	±15°	±30°
RESOLUTION	0.05°		
OUTPUT VOLTAGE RANGE (VDC)	0.5-4.5		
FULL RANGE OUTPUT (FRO) ² VDC ± 0.5%	±0.30		
SCALE FACTOR (V/g, nominal)	0.4000 ±0.0012	0.1333 ±0.0004	0.0667 ±0.0002
SCALE FACTOR TEMP. SENSITIVITY (PPM/°C, max)	±150		
NONLINEARITY (%FRO) ³ max	2		
NONREPEATABILITY (° max)	0.002		
BANDWIDTH (-3db, Hz, nominal)	<1		
TRANSVERSE AXIS MISALIGNMENT (° max)	±1		
RELATIVE ACCURACY (° max)	0.10	0.16	0.30
0° OUTPUT RANGE (Volts)	±0.03		
0° OUTPUT TEMP. SENSITIVITY (Volts/°C, max)	±0.005		
START UP TIME (seconds max)	5		
RESPONSE TIME (seconds max)	0.3		

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	2
INPUT VOLTAGE RANGE (VDC)	9 to 30
INPUT CURRENT (mA, max)	15
OUTPUT IMPEDANCE (Ohms, nominal)	10
NOISE (Vrms max)	0.006
OPERATING TEMPERATURE RANGE	-40° to +85 °C
STORAGE TEMPERATURE RANGE	-50° to +105 °C
SHOCK (g, 1 msec, 1/2-sine)	500
WEIGHT (grams)	210 (7.4 oz.)
SEAL	IP67
CABLE	2m (6.6 ft), flying leads

NOTES:

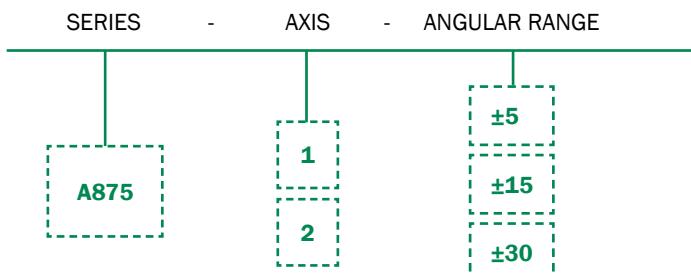
1. Custom ranges available on request
2. Full range is defined as "from negative full input angle to positive full input angle." The Inclinometer output is proportional to the sine of the tilt angle.
3. Nonlinearity is specified as variation around the best straight line from null to full-range output

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



ORDERING INFORMATION

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



	MODEL #	PART #
±5	A875-1-5	98875-111
	A875-2-5	98875-211
±15	A875-1-15	98875-112
	A875-2-15	98875-212
±30	A875-1-30	98875-113
	A875-2-30	98875-213

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