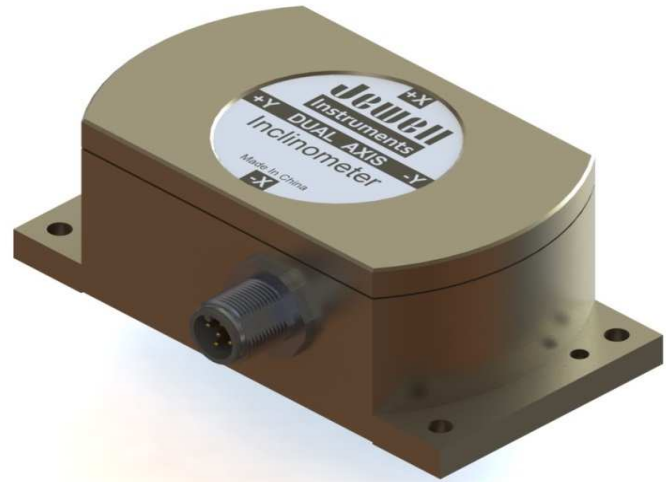
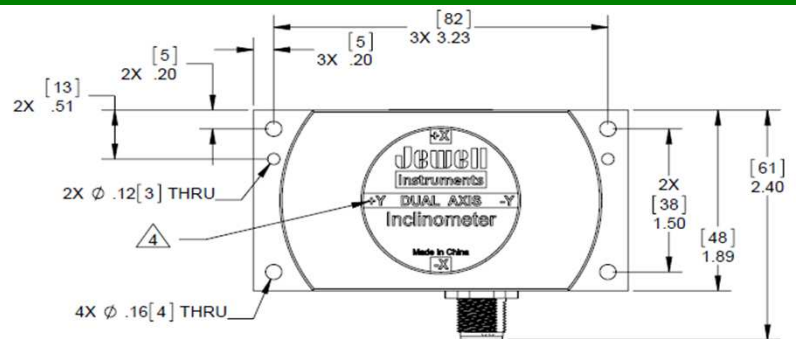


The model DMI is a high precision, digital MEMS inclinometer with built-in thermal compensation. Standard units come with RS232, RS422, RS485 or TTL output options. All DMI series inclinometers are rated IP67 for waterproofing up to 1m. Custom ranges and output types are also available on request.



## Outline Diagram

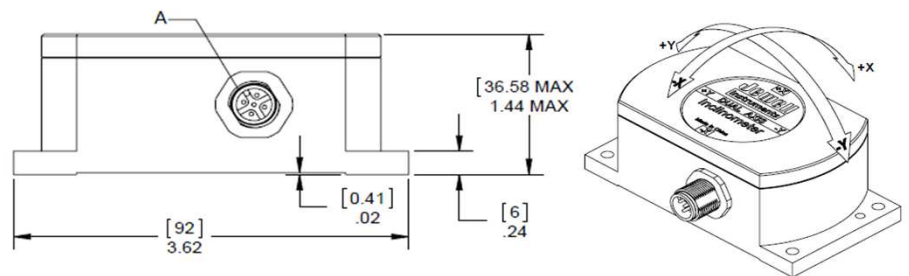


## Features & Benefits:

- Single-Axis and Dual-Axis Available
- Resolution: 0.001°
- Zero Temperature Coefficient to  $\pm 0.002^\circ/\text{C}$
- RS232, RS422, RS485 & TTL Outputs
- -40° to +85°C Operating Range
- High Shock & Vibration Tolerance
- 2m cable whip included

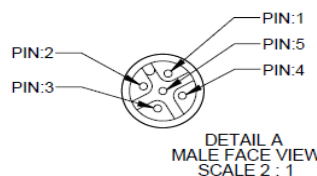
## Applications:

- Geotechnical Monitoring
- Radar & Vehicle Platform Leveling
- Drill Rig Alignment
- Offshore/Subsea Platform Pitch & Roll
- Industrial Measurement & Control
- Railway Track Alignment & Maintenance
- Antenna Position Control



\*Dimensions in Inches [mm]

## Pin Out



Pin	Function
1	+VDC 9V~36V
2	RS232 (Rx), RS485 (D+)
3	RS232 (Tx), RS485 (D-)
4	Ground
5	Factory Use Only

Consult Factory for RS422

Rev I

## Performance Specifications

### STATIC/DYNAMIC

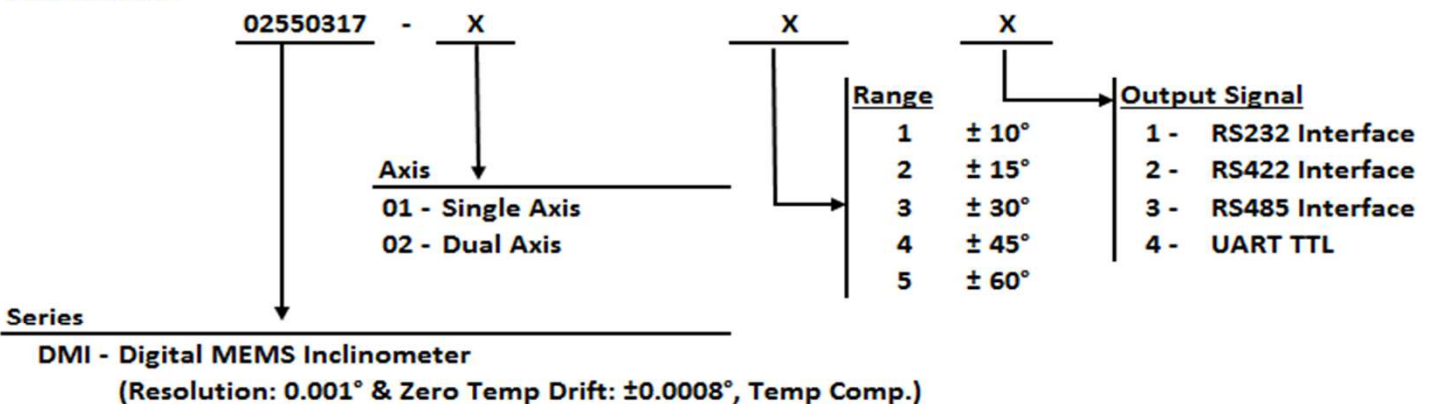
* Angular Range, °	±10°	±30°	±60°
Resolution, °	0.001	0.001	0.001
Hysteresis, °	0.003	0.005	0.008
Zero Tolerance (°)	0.1	0.1	0.1
Zero Temperature Coefficient, °/°C	±0.002	±0.003	±0.004
Scale Factor Tolerance (%)	0.7	1.4	2.8
Scale Factor Temperature Coefficient, ppm/°C	≤50	≤50	≤50
Warm Up, s	0.5	0.5	0.5
Time Constant, s	0.02	0.02	0.02

### ELECTRICAL AND ENVIRONMENTAL

Output Rate	5Hz, 15Hz, 35Hz, 50Hz
Output Type	RS232, RS422, RS485, UART TTL
Electromagnetic Compatibility	EN61000 and GBT17626
Impact Resistance	100g@11ms, 3 times/axis (1/2 sinusoid)
Vibration Resistance	10grms @ 10-1000Hz
Temperature Rating, Operation	-40 to +85°C
Temperature Rating, Storage	-55 to +100°C
Enclosure	Anodized Aluminum
Seal	IP67
Cables	2m Cable (standard)
Weight	150g (without cable)
Power Requirements	9-36 VDC @ 60mA

Notes: \* - Custom ranges available, please see model number structure below.

#### How To Order:



#### Example:

02550317-0221

DMI Dual Axis, +/-15 degree, RS232 Interface

Note: ATP report is included with every unit

ATP Report Includes: Scale Factor, Axis Misalignment, Bias, Linearity, Input Current, Thermo Data Points.

Jewell Instruments LLC 850 Perimeter Road, Manchester, NH 03103

sales@jewellinstruments.com • www.jewellinstruments.com • Tel (800) 227-5955

三協インタナショナル株式会社

東京03-3662-8100 名古屋052-709-1781 大阪06-6372-5843