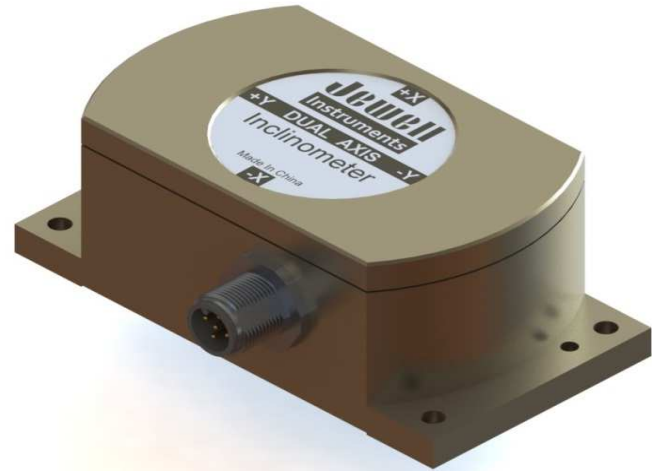
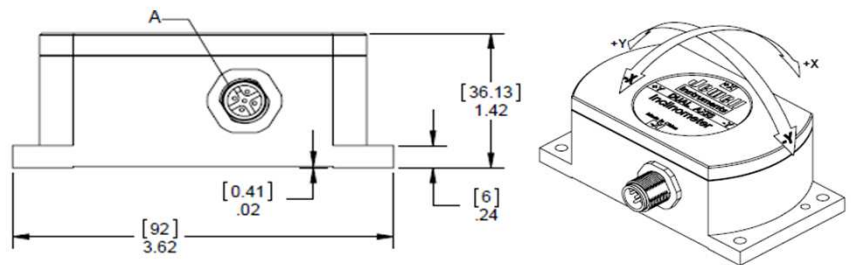
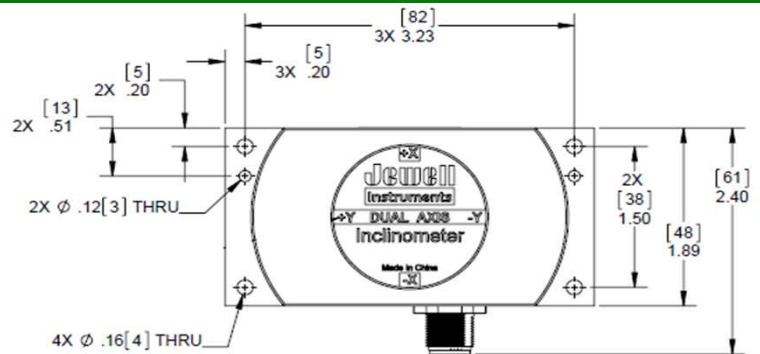


The model DMP digital MEMS inclinometer provides advanced thermal compensation in a high precision, robust package. Resolution is to  $<0.0005^\circ$ . Standard units come with RS232, RS422, RS485 or TTL output options. Custom ranges and output types are also available on request.



## Outline Diagram



\*Dimensions in Inches [mm]

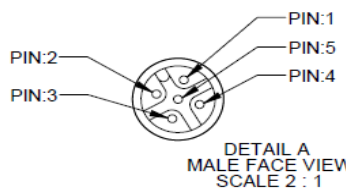
## Features & Benefits:

- Single and Dual-Axis Available
- Resolution to  $<0.0005^\circ$
- Minimal Thermal Drift ( $<0.002^\circ/\text{C}$  Zero)
- Digital RS232, RS422, RS485 or TTL Output
- $-40^\circ$  to  $+85^\circ\text{C}$  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

## 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 J

## Performance Specifications

### STATIC/DYNAMIC

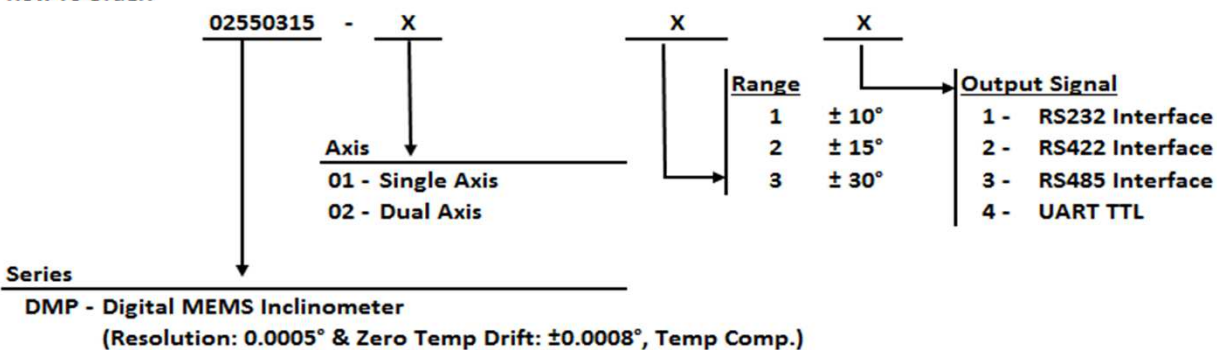
* Angular Range, °	±10°	±15°	±30°
Resolution, °	0.0005	0.0005	0.0005
Hysteresis, °	0.001	0.001	0.002
Zero Tolerance (°)	0.1	0.1	0.1
Zero Temperature Coefficient, °/°C	±0.002	±0.002	±0.002
Scale Factor Tolerance (%)	0.7	1.1	1.4
Scale Factor Temperature Coefficient, ppm/°C	≤50	≤50	≤50
Warm Up, s	0.5	0.5	0.5
Time Constant, s	0.05	0.05	0.05

### 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
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:

02550315-0123

DMP Single Axis, +/- 15 degrees, RS485 Interface

Note: ATP report is included with every unit

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