

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.



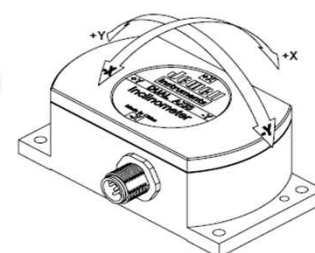
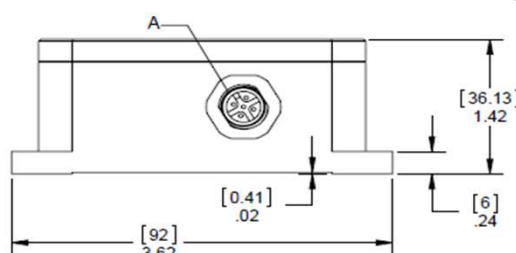
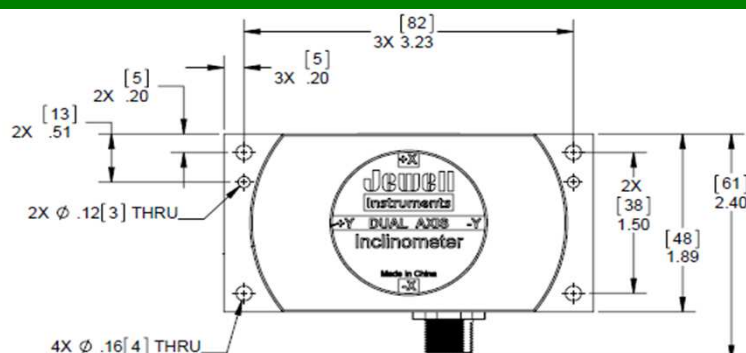
Outline Diagram

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° to $+85^\circ\text{C}$ Operating Range
- High Shock & Vibration Tolerance
- 2m cable whip included

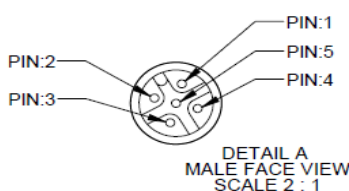
Applications:

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



**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

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

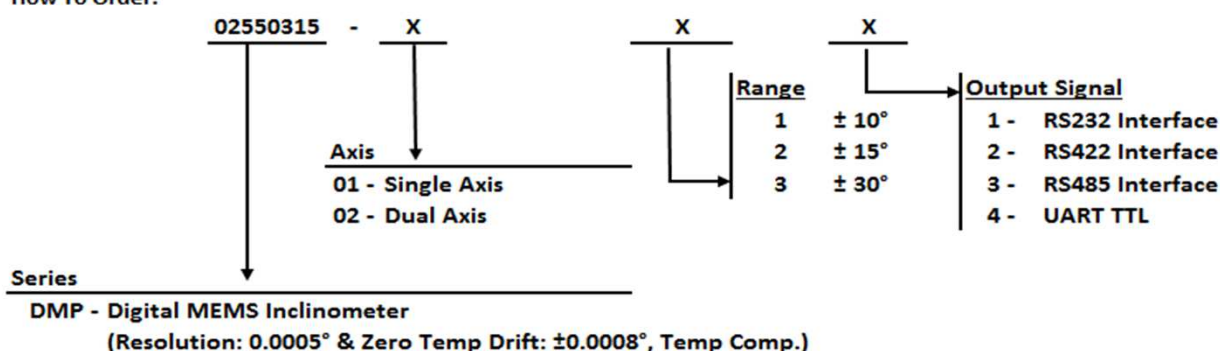
ELECTRICAL AND ENVIRONMENTAL

Output Rate	5Hz, 15Hz, 35Hz, 50Hz
Output Type	RS232, RS422, RS485, UART TTL
Electromagnetic Compatability	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.

Specifications are subject to change on account of continued product development.

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.