

Features & Benefits

Applications

Performance Specs
Static/Dynamic

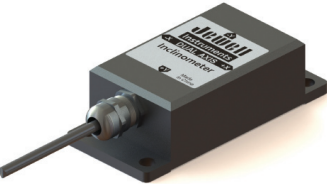
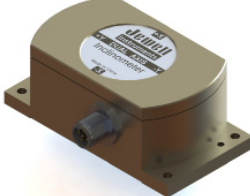
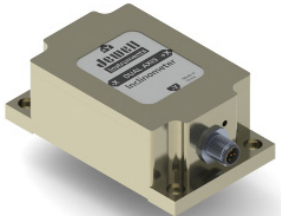
Angular Range ¹ (°)	±10	±30	±60	±90	±10	±30	±60	±90	±14.5	±30	±90	±10	±30	±60	±10	±30	±60	±10	±30	±60	±90	±10	±30	±60	±90	±10	±30	±60	±90	±10	±15	±30	±60	±10	±30	±45	±60	±10	±15	±30	±1	±3	±14.5	±30	±60	Angular Range ¹ (°)										
Resolution (°)	0.05				0.01				0.002	0.002	0.004	0.001				0.001				0.003	0.003	0.008	0.0005				0.0001				0.0005				0.0001				0.0001				Resolution (°)													
Hysteresis (°)	0.1	0.2	0.2	0.2	0.02	0.05	0.08	0.1	0.014	0.007	0.004	0.005	0.008	0.01	0.003	0.005	0.008	0.003	0.01	0.02	0.1	0.02	0.05	0.08	0.1	0.005	0.007	0.008	0.01	0.005	0.007	0.008	0.01	0.003	0.005	0.007	0.008	0.001	0.001	0.002	0.0001				Hysteresis (°)											
Zero Temp Coefficient, °/°C	±0.02				±0.01				±0.004				±0.006				±0.002				±0.005				±0.02				±0.01				±0.006				±0.002				0.0001				Zero Temp Coefficient, °/°C											
Scale Factor Temp Coefficient (PPM/°C)	≤350				≤200				150				≤200				≤50				≤50				≤200				≤200				≤50				≤50				100				Scale Factor Temp Coefficient (PPM/°C)											
Warm Up (s)	0.5				0.5				0.5				0.5				0.5				0.5				0.5				0.5				0.5				0.5				0.5				100				Scale Factor Temp Coefficient (PPM/°C)							
Time Constant (s)	0.05				0.05				0.032				0.05				0.02				0.02				0.05				0.05				0.05				0.05				0.02				0.05				N/A				Time Constant (s)			

Electrical & Environmental

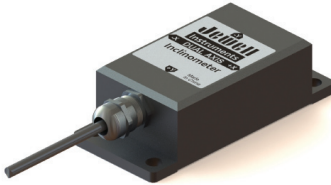
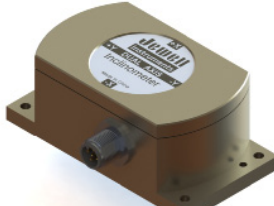
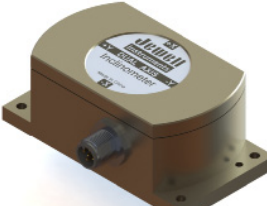
Output	0-5V, 0.5 - 4.5V or 4-20mA	0-5V, 0.5 - 4.5V or 4-20mA	±5V, 0-5V or 4-20mA	0-5V, 0.5 - 4.5V or 4-20mA	0-5V, 0.5 - 4.5V or 4-20mA	0-5V, 0.5 - 4.5V or 4-20mA	±5V & ±10V	5Hz, 15Hz, 35Hz, 50Hz	5Hz, 15Hz, 35Hz, 50Hz	5Hz, 15Hz, 35Hz, 50Hz	5Hz, 15Hz, 35Hz, 50Hz	5Hz, 15Hz, 35Hz, 50Hz	5Hz, 15Hz, 35Hz, 50Hz	3.3, 7.8, 15.6, 31.2, 62.5, 125 (Hz)	Output
Output Type ²								RS232, RS485 or TTL	RS232, RS485 or TTL	RS232, RS485 or TTL	RS232, RS485 or TTL	RS232, RS485 or TTL	RS232, RS485 or TTL	RS485	Output Type ²
Electromagnetic Compatibility	EN61000 and GBT17626	EN61000 and GBT17626	N/A	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626	N/A	Electromagnetic Compatibility
Impact Resistance	100g@11ms, 3 times/axis (1/2 sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100 g, 0.011 sec, ½ sine	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	20grms @ 20Hz to 2KHz	Impact Resistance
Vibration Resistance	10grms @ 10-1000Hz	10grms @ 10-1000Hz	100 g, 0.011 sec, ½ sine	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz	20grms @ 20Hz to 2KHz	Vibration Resistance
Temperature Rating, Operation	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	Temperature Rating, Operation
Temperature Rating, Storage	-55 to +100°C	-55 to +125°C	-40 to +95°C	-55 to +100°C	-55 to +100°C	-55 to +100°C	-55 to +100°C	-55 to +100°C	-55 to +125°C	-55 to +125°C	-55 to +100°C	-55 to +100°C	-55 to +100°C	-55 to +105°C	Temperature Rating, Storage
Enclosure			Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum			Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum	Enclosure
Seal	IP67	IP67	IP65	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	Seal
Cables	1m Cable (standard)	1m Cable (standard)	N/A	1m Cable (standard)	2m Cable (standard)	2m Cable (standard)	2m Cable (standard)	1m Cable (standard)	1m Cable (standard)	1m Cable (standard)	2m Cable (standard)	2m Cable (standard)	2m Cable (standard)	DB9, USB or Wired	Cables
Weight	90g (without cable)	120g (without cable)	165 (1 axis), 170 (2 axes)	150g (without cable)	150g (without cable)	150g (without cable)	150g (without cable)	90g (without cable)	150g	150g (without cable)	150g (without cable)	150g (without cable)	150g (without cable)	160g	Weight
Power Requirements	9-36 VDC @ 60mA	9-36 VDC @ 60mA	±12 to ±18 VDC (±5V) 12 to 30 VDC (0-5V) 28mA (4-20mA)	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA	800 mW, max - RS485 termination enabled 600 mW, max - RS485 termination disabled	Power Requirements

Notes: 1 - 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., 2 - Referenced to theoretical sine value independent of misalignment., 3 - Output phase angle = -90° 4 - Other ranges available upon request

Analog Sensors

 AML Series - Single and Dual Axis Available Resolution <0.05° Zero Temp Coefficient ±0.02°/°C - High Shock & Vibration Tolerance - Analog 0-5V, 0.5-4.5V & 4-20mA Output Options -40° to +85°C Temp Range - Solar Tracking & Panel Positioning - Vehicle Wheel Alignment - Industrial Measurement & Control - Radar/Antenna Mast Alignment - Platform Leveling - Navigation Pitch/Roll Measurement	 AMS Series - Single and Dual Axis Available Resolution <0.01° Zero Temp Coefficient ±0.01°/°C - High Shock & Vibration Tolerance - Analog 0-5V, 0.5-4.5V & 4-20mA Output Options - Up to ±90° Full Range Output - Boom Position and Control - Radar and Vehicle Platform Positioning - Industrial Measurement & Control - Drilling Equipment - Navigation Pitch/Roll Measurement	 JMI Series - Single and Dual Axis Available Resolution to 0.002° RoHS Compliant - Lightweight Aluminum Enclosure - Temperature Sensors Option Available - Industrial Automation & Control - Construction & Agricultural Equipment - Platform Leveling/Positioning - Railway Track Alignment & Maintenance	 AMH Series - Single and Dual Axis Available Resolution <0.001° Zero Temp Coefficient ±0.006°/°C - High Shock & Vibration Tolerance - Analog 0-5V, 0.5-4.5V & 4-20mA Output Options -40° to +85°C Temp Range - Radar & Vehicle Platform Leveling - Drill Rig Alignment - Offshore/Subsea Platform Pitch & Roll - Industrial Measurement & Control	 AMI Series - Single and Dual Axis Available Resolution <0.001° Zero Temp Coefficient ±0.002°/°C - Excellent Performance over Temp - Analog 0-5V, 0.5-4.5V & 4-20mA Output Options -40° to +85°C Temp Range - Radar & Vehicle Platform Leveling - Drill Rig Alignment - Offshore/Subsea Platform Pitch & Roll - Industrial Measurement & Control	 AMV Series - Single and Dual Axis Available Resolution <0.001° Zero Temp Coefficient ±0.005°/°C - Excellent Performance over Temp - Analog ±5V & ±10V Output Options -40° to +85°C Temp Range - Radar & Vehicle Platform Leveling - Drill Rig Alignment - Offshore/Subsea Platform Pitch & Roll - Industrial Measurement & Control
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Digital Sensors

 DML Series - Single and Dual Axis Available Resolution <0.05° Zero Temp Coefficient ±0.02°/°C -40° to +85°C Operation and Storage - Digital RS232, RS485 or UART TTL Outputs - Solar Tracking & Panel Positioning - Vehicle Wheel Alignment - Industrial Automation & Control - Radar/Antenna Mast Alignment - Platform Leveling - Navigation Pitch/Roll Measurement	 DMS Series - Single and Dual Axis Available Resolution <0.01° Zero Temp Coefficient ±0.01°/°C - Digital RS232 or RS485 and UART TTL Outputs -40° to +85°C Operating Range - Boom Position and Control - Radar and Vehicle Platform Leveling - Drilling Equipment - Navigation Pitch/Roll Measurement - Industrial Measurement & Control	 DMH Series - Single and Dual Axis Available Resolution <0.001° Zero Temp Coefficient ±0.006°/°C - Up to ±90° Angular Range -40° to +85°C Temperature Range - Antenna Deflection Measurement - Radar and Vehicle Platform Positioning - Drill Rig Alignment - Offshore Platform Pitch/Roll - Industrial Measurement & Control	 DMI Series - Single and Dual Axis Available Resolution <0.001° Zero Temp Coefficient ±0.002°/°C - Digital RS232, RS422, RS485 or UART TTL Output Options - High Shock and Vibration Tolerance - Radar and Vehicle Platform Leveling - Drill Rig Alignment - Offshore/Subsea Platform Pitch/Roll - Industrial Measurement & Control - Antenna Position Control	 DMP Series - Single and Dual Axis Available Resolution <0.0005° Minimal Thermal Drift (<0.002°/°C Zero) - Digital RS232, RS422, RS485 or UART TTL Output -40° to +85°C Operating Range - High Shock & Vibration Tolerance - Radar and Vehicle Platform Leveling - Drill Rig Alignment - Offshore/Subsea Platform Pitch/Roll - Industrial Measurement & Control - Antenna Position Control	 JDI Series - Single and Dual Axis Available Resolution 0.0001° Full Temperature Compensation to 0.005° Accuracy - Digital RS485 Output -40° to +85°C Operating Range - High Shock & Vibration Tolerance - RoHS Compliant - Industrial Automation & Control - Construction & Agricultural Equipment - Solar Tracking - Mobile Cranes - Platform Positioning & Leveling
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Features & Benefits

Applications

Performance Specs
Static/Dynamic