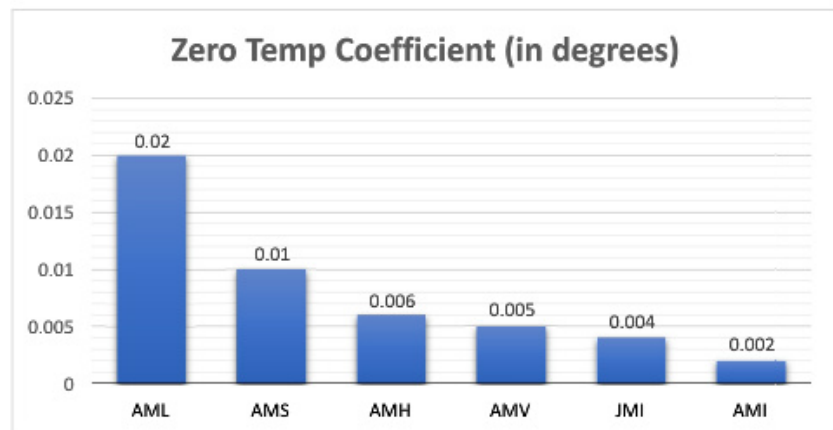
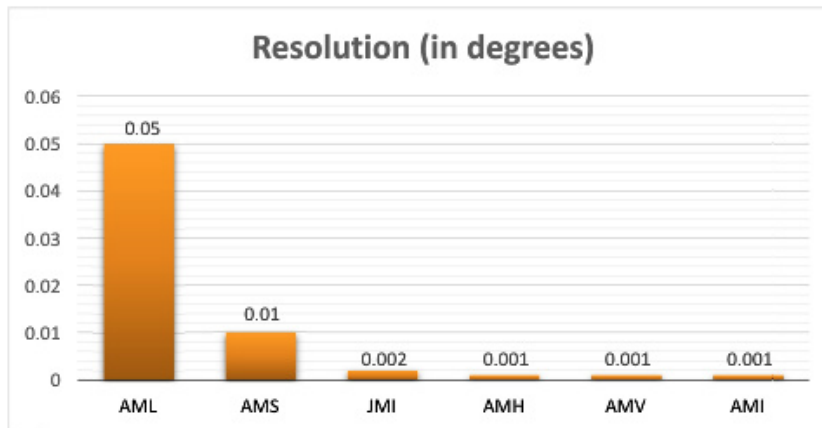


Analog MEMS Inclinometer Comparison Charts



Rev 1



Features & Benefits

Applications

Performance Specs

Static/Dynamic

	AML Series				AMS Series				JMI Series		
Angular Range ¹ (°):	±10	±30	±60	±90	±10	±30	±60	±90	±14.5	±30	±90
Resolution (°):	0.05				0.01				0.002	0.002	0.004
Hysteresis:	0.1	0.2	0.2	0.2	0.02	0.05	0.08	0.1	0.014	0.007	0.004
Zero Temp Coefficient, °/°C:	±0.02				±0.01				±0.004		
Scale Factor Temp Coefficient (PPM/°C):	≤350				≤200				150		
Warm Up (s):	0.5				0.5				0.5		
Time Constant (s):	0.05				0.05				0.032		

Electrical & Environmental

	AML Series	AMS Series	JMI Series
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
Output Type ² :			
Electromagnetic Compatibility:	EN61000 and GBT17626	EN61000 and GBT17626	N/A
Impact Resistance:	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100 g, 0.011 sec, ½ sine
Vibration Resistance:	10gms @ 10-1000Hz	10gms @ 10-1000Hz	100 g, 0.011 sec, ½ sine
Temperature Rating, Operation:	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Temperature Rating, Storage:	-55 to +100 °C	-55 to +125 °C	-40 to +95 °C
Enclosure:			Anodized Aluminum
Seal:	IP67	IP67	IP65
Cables:	1m Cable (standard)	1m Cable (standard)	N/A
Weight:	90g (without cable)	120g (without cable)	165 (1 axis), 170 (2 axes)
Power Requirements:	9-36 VDC @ 60mA	9-36 VDC @ 60mA	±12 to ±18 VDC (±5V) 12 to 30 VDC (0-5V) 28mA (4-20mA)

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 MEMS Inclinometers

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 Automation & 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



Features & Benefits

Applications

Performance Specs Static/Dynamic

	±10	±30	±60	±10	±30	±60	±10	±30	±60
Angular Range ¹ (°):									
Resolution (°):		0.001			0.001			0.001	
Hysteresis:	0.005	0.008	0.01	0.003	0.005	0.008	0.003	0.01	0.02
Zero Temp Coefficient, °/°C:		±0.006			±0.002			±0.005	
Scale Factor Temp Coefficient (PPM/°C):		≤200			≤50			≤50	
Warm Up (s):		0.5			0.5			0.5	
Time Constant (s):		0.05			0.02			0.02	

Electrical & Environmental

Output:	0-5V, 0.5 - 4.5V or 4-20mA	0-5V, 0.5 - 4.5V or 4-20mA	±5V & ±10V
Output Type ² :			
Electromagnetic Compatibility:	EN61000 and GBT17626	EN61000 and GBT17626	EN61000 and GBT17626
Impact Resistance:	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)	100g@11ms, 3 times/axis (½ sinusoid)
Vibration Resistance:	10grms @ 10-1000Hz	10grms @ 10-1000Hz	10grms @ 10-1000Hz
Temperature Rating, Operation:	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Temperature Rating, Storage:	-55 to +100 °C	-55 to +100 °C	-55 to +100 °C
Enclosure:	Anodized Aluminum	Anodized Aluminum	Anodized Aluminum
Seal:	IP67	IP67	IP67
Cables:	1m Cable (standard)	2m Cable (standard)	2m Cable (standard)
Weight:	150g (without cable)	150g (without cable)	150g (without cable)
Power Requirements:	9-36 VDC @ 60mA	9-36 VDC @ 60mA	9-36 VDC @ 60mA

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 MEMS Inclinometers

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