





AMH SERIES

Analog MEMS Inclinometer

The Model AMH is a high precision MEMS inclinometer. Standard units are available with 0-5V, 0.5-4.5V, or 4-20mA output options. All AMH series inclinometers are rated IP67 for waterproofing up to 1m. Custom ranges and output types are also available on request.



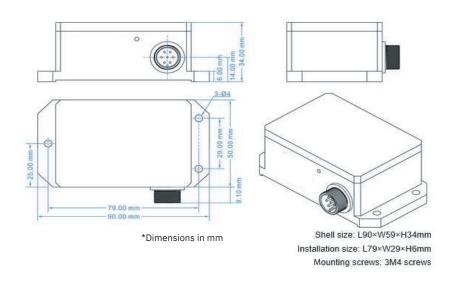
FEATURES

- Single-Axis and Dual-Axis Available
- Resolution: 0.001°
- Zero Temperature Coefficient: ±0.006°/°C
- 0-5V, 0.5 4.5V & 4-20mA Output
- -40° to +85°C Operating Range
- 1m cable whip included

APPLICATIONS

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

OUTLINE DIAGRAM



PIN OUT

7-pin		Function
1		12-
		36Vdc
2		X-Axis Out
3		Y-Axis Out
4		Powe Ground
5		Signal Ground
6		Not used
7		Not used





PERFORMANCE SPECIFICATIONS

STATIC/DYNAMIC

Angular Range, °	±10°	±30°	±60°	
Resolution, °	0.001	0.001	0.001	
Hysteresis, °	0.005	0.008	0.01	
Zero Tolerance (°)	0.01	0.01	0.01	
Zero Temperature Coefficient, °/°C	±0.006	±0.006	±0.006	
Scale Factor Tolerance (%)	0.7	1.4	2.8	
Scale Factor Temperature Coefficient, ppm/°C	≤200	≤200	≤200	
Warm Up, s	0.5	0.5	0.5	
Time Constant, s	0.05	0.05	0.05	
FLECTRICAL AND ENVIRONMENTAL				

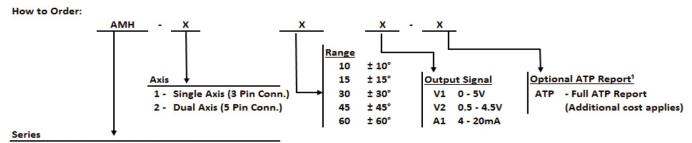
ELECTRICAL AND ENVIRONIVIENTAL			
Output	0-5V, 0.5 - 4.5V or 4-20mA		
Electromagnetic Compatibility	EN61000 and GBT17626		
Impact Resistance	100g@11ms, 3 times/axis (1/2 sinusoid)		
Vibration Resistance	10grms @ 10-1000Hz		
Temperature Rating , Operation	-40 to +85°C		
Temperature Rating, Storage	-55 to +100°C		
Enclosure	Anodized Aluminum		
Seal	IP67		
Cables	1m Cable (standard)		
Weight	150g (without cable)		
Power Requirements	12-36 VDC @ 60mA		

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

Specifications subject to change without notice on account of continued product development



HOW TO ORDER



AMH - Analog MEMS Inclinometer

Example:

AMH - 1 - 15 - V1 - ATP

AMH Single Axis, +/- 15 degrees, 0-5V Output, Full ATP Report

1 - Note: "ATP" must be added to the end of the part number for a full ATP report. An additional cost will apply. ATP Report Includes: Scale Factor, Axis Misalignment, Bias, Linearity, Input Current.

PART NUMBERS

	Single-axis		Dual-axis	
	Model #	Part #	Model #	Part #
	AMH-1-10-V1	02550318-0111	AMH-2-10-V1	02550318-0211
Voltage output	AMH-1-15-V1	02550318-0121	AMH-2-15-V1	02550318-0221
Voltage output (0-5Vdc)	AMH-1-30-V1	02550318-0131	AMH-2-30-V1	02550318-0231
(0-3000)	AMH-1-45-V1	02550318-0141	AMH-2-45-V1	02550318-0241
	AMH-1-60-V1	02550318-0151	AMH-2-60-V1	02550318-0251
	AMH-1-10-V2	02550318-0112	AMH-2-10-V2	02550318-0212
Voltage output	AMH-1-15-V2	02550318-0122	AMH-2-15-V2	02550318-0222
Voltage output (0.5-4.5Vdc)	AMH-1-30-V2	02550318-0132	AMH-2-30-V2	02550318-0232
(0.5-4.5Vuc)	AMH-1-45-V2	02550318-0142	AMH-2-45-V2	02550318-0242
	AMH-1-60-V2	02550318-0152	AMH-2-60-V2	02550318-0252
	AMH-1-10-A1	02550318-0116	AMH-2-10-A1	02550318-0216
	AMH-1-15-A1	02550318-0126	AMH-2-15-A1	02550318-0226
Current output	AMH-1-30-A1	02550318-0136	AMH-2-30-A1	02550318-0236
(4-20mA)	AMH-1-45-A1	02550318-0146	AMH-2-45-A1	02550318-0246
	AMH-1-60-A1	02550318-0156	AMH-2-60-A1	02550318-0256

NOTE: If ATP report is required, please add "-ATP" to model & part numbers. Additional charges will apply

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