

# AS-001 High -Precision Inclination Instrument

SKU : MS-100A0

## PRODUCT DESCRIPTION

AS001 is a triaxial accelerometer based on micromechanical technology, by measuring the acceleration velocity meter and using advanced signal processing algorithm technology to get high precision inclination information under complex working conditions. The product is benchmarked against the performance of servo inclinometers. The product is benchmarked against the performance of servo inclinometers, with both 4~20mA analog output and digital output in two forms.



## PRODUCT FEATURES

- Comparable to the performance of servo inclinometers, with an inclination accuracy better than 0.01°
- Operating temperature range: -40~65°C
- Very high shock and vibration resistance, vibration environment performance does not deteriorate
- IP65 sealed housing, suitable for harsh environments
- Rich interface types, support RS422, current/voltage output and other standard interfaces
- High reliability

## APPLICATION AREAS

- Structural alignment (mills, alternators, etc.)
- Safety inspection (cranes, offshore platforms)
- Level measurement (roads, railroad tracks)
- Angular measurement
- Positioning of shooting platforms, radar antennas

## PERFORMANCE INDEX

Environmental parameters	
Operating temperature	-40°C ~ +80°C
Storage temperature	-55°C ~ +85°C
Network	NF EN 61326 (Industry)
Vibrations	5g/20Hz ~ 500Hz
Impact	200g/6ms
Protection	IP 65
General parameters	
Power supply	240V DC, 35mA (max.) (4-20mA version: 55mA (max.))
Power consumption	60mA (max.) (voltage output) / 100mA (max.) (current output)
Bandwidth	2~10Hz depending on demand
Output	±5V or 4-20mA or RS422 serial digital output
Non-linear error	<0.1% FS

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Irreproducibility and lagging	<0.05% FS		
Cross-axis sensitivty	<0.005g/g		
Deviation	0.1% FS		
Electronic Noise	<2mVrms (0~1kHz)		
Zero point temperature drift	0.01% FS/°C		
Sensitivity temperature drift	0.01% Signal/°C		
Selection Guide			
Measurement range	Bandwidth	Product Reference Voltage Output	Product reference current output
±3°	4Hz	690 041 489	690 041 485
±5.75°	4Hz	690 041 419	690 041 415
±14.5°	5Hz	690 041 429	690 041 425
±30°	6Hz	690 041 439	690 041 435
±45°	8Hz	690 041 449	690 041 445
±90°	12Hz	690 041 459	690 041 455
Choose Customization	Special bandwidth Special ranges and output signals Zero offset (unipolar output) Linearity < 0.05% FS Integrated temperature sensor		

## ELECTRICAL CHARACTERISTICS

- Power supply: 24V DC (typical)
- Rated power: 1.5W (maximum)
- Ripple: 100mV (peak to peak)

## STRUCTURAL INTERFACE

