# Vibration/Inclinometer Sensor



- $\ \$   $\ \$  Up to 5mg resolution accuracy and 0.5% linearity accuracy for high sensitivity detection.
- Configurable range in real time online

#### Various installation methods

MJD series equipped with cylindrical thread structure

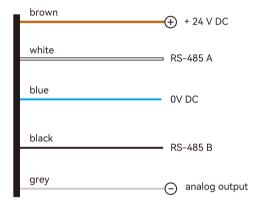




MJL Series

# Configure serial ports, analog quantities and IO

MJD series vibration acceleration products are equipped with multiple output modes. Through the debugging software, the voltage and current analog outputs can be easily configured and configured with RS485 and RS232 serial communication outputs.



# MJD series Resolution/Range 62.50mg @ ±2g 31.25mg @ ±4g 62.50mg @ ±8g 125mg @ ±16g (Rangecan be set)

### Excellent measurement accuracy and stability

Up to 5mg resolution accuracy and 0.5% linearityaccuracy High sensitivity detects whether there is vibration or whether the level of vibration has changed

# Realize X, Y, Z three-axis acceleration measurement

MJD series products can realize X,Y, Z measurement and output three-axis acceleration measurement values through the serial port.



MEMS(Microelectromechanical systems)

Fiber Optic
Slot Sensors
Photoelectric
Laser
Proximity
Displacement
Magnetic
Contact
Area
Ultrasonic
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Code Readers

Guidance

Temperature
RFID
Safety door lock
Pressure Switch
Communication
Accessories

Triaxial Measurement

Fiber Optic

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Dual axis measurement

#### **Product Highlights**

#### Configure interrupt function

Interrupt signal management via RS485 or analog configuration
Interrupt analog configuration in three modes (standard, switching, pulse)



#### **Standard**

The analog output cannot send any alarmsreported, whether theinterrupt is available or unavailable through theanalog output, it follows thestandard trend in speed



#### **Switching**

The acceleration exceeds the threshold value and the continuous value, causing an alarm.

The output status is at the most Switch between minimum and maximum values



#### Pulse

In this mode, the analog output is always at the minimum value.

Each time the threshold and duration are exceeded, the output is switched to the maximum value, remains at the high value for at least 5ms, and then returns to the minimum value.

Mode limits alarm acknowledgment frequency

#### Application



Industrial Robot



Aerial Work Platform



Logistics Conveyor System



Agricultural Tractors/ Earthmoving Vehicles



Oilfield Pumping Units



Photovoltaic Industry



Medical Instruments



Bridge Crane

#### Selection guide



#### Three-axis measurement

- $\bullet \;$  Simultaneous measurement of XYZ three directions
- Supported by RS485 communication.
- 316L stainless steel enclosure



#### **Dual Axis Measurement**

- Wide voltage input, 9~36V DC
- Resolution is 0.05°
- Biaxial inclination measurement

P.M-05

#### MJD Series



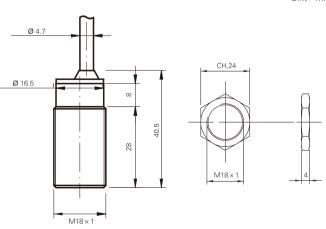
Basic Features	working principle	Principle of inertia			
	Enclosure type	Cylindrical			
	Detect range	±16g(MAX)			
	Detect axis	3(X,Y,Z)			
	Resolution	15.62mg@±2g; 31.25mg@±4g; 62.50mg@±8g; 125mg@±16g			
	Technical	MEMS(microelectromechanical system)			
Electrical data	Operating Voltage	24VDC ± 20%			
	Power consumption	<1W			
	Digital output	RS-485 (addressable) 57600 baud - 1 bit stop - no parity			
	Resolution Digital Output	16 bit@RS-485;12 bit@Analog output			
	Voltage analog output	0~5V/0~10V(programmable)			
	Current analog output	0~5V/0~10V(programmable)			
	Vibration frequency	0~400Hz			
	resistance	Resistance (voltage): 1k~1MΩ; resistance (current): 100~500 Ω			
	protect the circuit	Reverse polarity protection, surge protection			
Environmental conditions	Working temperature	-25°C~+70°C			
	Storage temperature	-30°C∼+90°C No condensation			
	Working environment humidity	<80% No condensation			
	Protect degree	IP67			
Mechanical data	Connection method	5 core cable	M12,5PINConnector (20cm lead)		
	Dimensions	M18x40.5mm			
	Material	Stainless steel AISI 316L			
	Weight	100g			
	Accessories	Nut			
	Model	MJD18-W	MJD18-P		

#### Circuit Diagram

# Brown + 24 V DC White RS-485 A Blue 0V DC Black RS-485 B Gray Analog output

#### Dimensions

Unit: mm



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Dual axis measurement

#### **Dual Axis Measurement**

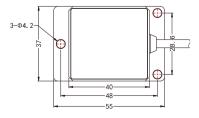
#### **MJL** Series

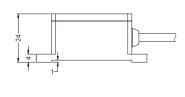


Basic Features	Working principle	Principle of inertia				
	Enclosure type	Square				
	Detection range	±10°	±30°	±60°	±90°	
	Detection axis	X,Y				
	Resolution	0.05°				
	Long-term stability	0.2		25		
Electrical data	Absolute precision	0.1° 0.2°		2°		
	Response time	0.02s				
	Power-on startup time	0.5s				
	Operating Voltage	9~36V				
	No load current	40mA				
	Mean time between failures(MTBF)	≥45000h/time				
	Output rate	5Hz、15Hz、35Hz、50Hz Can be set				
	Output signal	RS232/RS485/RS422/TTL/CAN				
	Electromagnetic compatibility	Follow En61000 and GBT17626				
	Insulation resistance	≥100M				
Environmental conditions	Working temperature	-40~+85°C				
	Storage temperature	-55~+100°C				
	Zero temperature drift	±0.01°/°C				
	Sensitivity temperature coefficient	≤150 ppm/°C				
	Vibration Resistance	10grms 10~1000Hz				
	Impact resistance	100g@11ms、Three-axis and Synchronous (Half-Sine Wave)				
	Protect degree	IP67				
Mechanical data	Connection method	M16/5 pin				
	Dimensions	55x37x24mm				
	Material	Stainless stee				
	Weight	90g(Excluding cables)				
	Accessories	Standard 1 meter length, wear-resistant, wide temperature, shielded cable (direct lead)				
Model	4~20mA	MJL326T-10-A1	MJL326T-30-A1	MJL326T-60-A1	MJL326T-90-A1	
	0~5V	MJL326T-10-V3	MJL326T-30-V3	MJL326T-60-V3	MJL326T-90-V3	
	RS232	MJL326T-10-23	MJL326T-30-23	MJL326T-60-23	MJL326T-90-23	
	RS485	MJL326T-10-48	MJL326T-30-48	MJL326T-60-48	MJL326T-90-48	

#### Dimensions

Unit: mm





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