INCLINOMETER MODEL M120

- Micro mechanical principle
- Low voltage power supply 3.3V or battery power supply
- No time drift and good nonlinearity
- Customize non-standard range or output

Model 120 series is a low power angle module. It was built in high performance MEMS components and low power circuit technology. The sensor can become more stable because of low noise, low temperature drift and low time drift. Its compact volume design can meet the application of various occasions.

APPLICATION

- Engineering , mining and metallurgical machinery
- Pile driver mast control
- Precise measurement of angle in other vibration
- Safety protection of high altitude platform
- Application in automatic control field

SPECIFICATION

	Item	Minimum	Typical	Maximum
Range			±60°	
Repeatability			0.05°	
0 Bias Temp.	-40~85°		0.08° /℃	
Nonlinearity			±1%FS	
Resolution			0.01°	
Setting time	-90%~90%		0.3s	
Supply	DC	3.0V	3.3V	3.6V
Current	No-load	4.0mA	4.5mA	5.0mA
Output	Voltage output / serial port output	RS232/SPI		
Operation Temp.		-40℃		85℃
Storage Temp.		-50℃		105℃
Storage humidity		<90%, non-condensing		
Connector		single row2.54mm*4		
Size	26*26mm			

NOTE:

(1 power supply voltage ripple is preferably less than 5mV

(2 output voltage will vary according to the supply voltage, for example, when the power supply voltage is 3.3V, the output voltage is 0~3.3V, the neutral point voltage is 1.65V; When the power supply voltage is 3.6V, the output voltage is 0~3.6V, the neutral point voltage is 1.8V.

(3 angle conversion formula: angle = (Vout - midpoint voltage) * measurement range / power supply voltage, such as range is plus or minus 60 degrees, power supply voltage is 3.3V, the measured output voltage is 1.98V, angle = (1.98 - 1.65) *60/3.3=6.0 degrees.

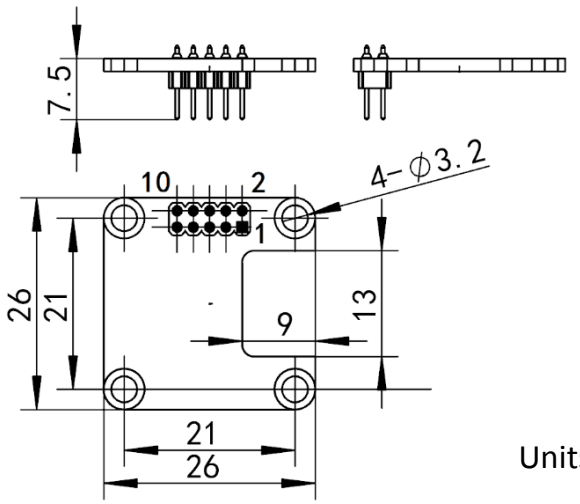
ORDERING INFORMATION

M120 X

Type

None	D
RS232	SPI

DIMENSIONS



Units: mm

WARRANTY

1. The date of the product from the factory warranty for 1 year, the damage suffered as a result not covered under warranty:
   a) Removal of artificial modification.
   b) Not required the use (such as supply voltage overload, short circuit, etc.) within the scope outlined in the manual.
2. In order to avoid a greater impact on your normal work but also delays the warranty period, please return the product to the factory, we will provide you with quality and efficient service.
3. Nova reserves the rights to improve products, product specifications and design are subject to change without notice.