

- Range: $\pm 2g \sim \pm 400g$
- Nonlinearity < 0.5%FS
- Low cost
- Calibration test report for every sensor
- Less weight with titanium housing
- EMC test proved



A16XXS is a high performance single-axis accelerometer, contains single high performance sensors, with differential output.

APPLICATION

- Vibration Analysis
- Online Monitoring
- Tilt Measurement
- 3 Degree Measuring

SPECIFICATION

Model Number	Input Range	Frequency Response (Nominal, 3 dB)	Sensitivity	Output Noise, Differential (RMS, typical)	Vibration Rectification @ 100Hz		Max. Mechanical Shock (0.1 ms)
					TYP	MAX	
UNITS	g	Hz	mV/g	$\mu\text{g}/(\text{root Hz})$	Mg/G2 (RMS)		g (peak)
A1602S	± 2	0 - 400	2000	5	0.30	0.75	2000
A1605S	± 5	0 - 600	800	7	0.20	0.40	
A1610S	± 10	0 - 1000	400	10	0.12	0.20	5000
A1625S	± 25	0 - 1500	160	25	0.05	0.10	
A1650S	± 50	0 - 2000	80	50	0.03	0.06	
A16100S	± 100	0 - 2500	40	100	0.02	0.05	
A16200S	± 200	0 - 3000	20	200	0.01	0.02	
A16400S	± 400	0 - 4000	10	400	0.01	0.02	

*By Model: VDD=VR=5.0 VDC, TC=25° C.



PARAMETERS

PARAMETER	MIN	TYP	MAX	UNITS
Cross Axis Sensitivity		1	2	%
Bias Calibration Error ²		0.5	1	% of full scale
Bias Temperature Shift (TC= -55 to +125° C) ¹		100	200	(ppm of full scale)/° C
Scale Factor Calibration Error ^{1,3}		0.5	1	%
Scale Factor Temperature Shift (TC= -55 to +125° C) ¹		100		ppm/° C
Non-Linearity (-90 to +90% of Full Scale) ^{1,3}		0.02	0.03	% of full scale
Long Term Bias Stability		1000	2500	PPM of full scale
In Run Bias Stability		3	5	PPM of full scale
Long Term Scale Factor Stability		TBD		PPM
Turn-On Transient	Typ: 0.5mV in 15 seconds			
Output Impedance		90		Ohms
Operating Voltage	4.75	5.0	5.25	volts
Operating Current (IDD+IVR) ¹		5	6	mA
Mass: 'L' package		0.62		grams

*All Models: Unless otherwise specified VDD=VR=5.0 VDC, TC=25° C, Differential. Full scale = g range = 4000 mV

SIGNALS & CABLE SPECIFICATIONS

DIGITAL OUTPUT

RED	POWER
BLACK	GND
YELLOW	TXD
BLUE	RXD

ANALOG OUTPUT

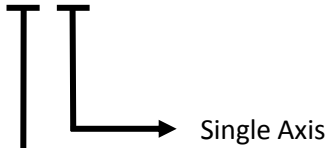
RED	POWER
BLACK	GND
YELLOW	Z-AXIS OUTPUT
BLUE	NC
BROWN	NC



ORDERING INFORMATION

A 160 X S

Type

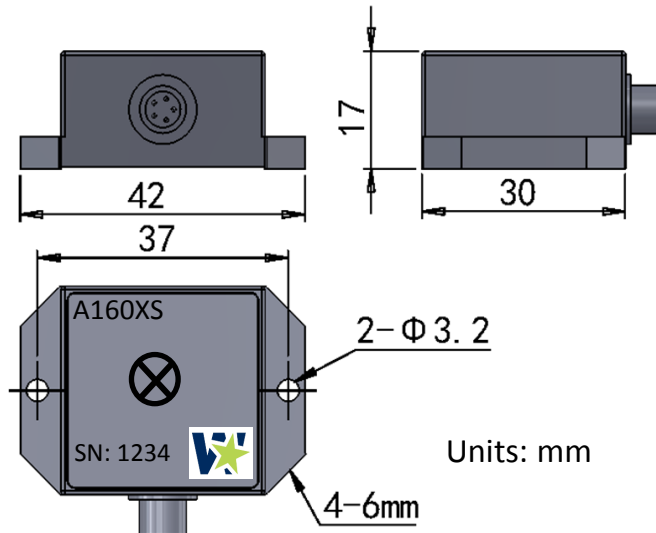


Measurement Range

02	05	10	25	50	100	200	400
±2g	±5g	±10g	±25g	±50g	±100g	±200g	±400g

Eg. A1602S is for Single axis about ±2g range with 0.5~4.5V output.

DIMENSIONS



WARRANTY

- The date of the product from the factory warranty for 1 year, the damage suffered as a result not covered under warranty:
 - Removal of artificial modification.
 - Not required the use (such as supply voltage overload, short circuit, etc.) within the scope outlined in the manual.
- 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.
- Nova reserves the rights to improve products, product specifications and design are subject to change without notice.