

Modbus Register Alias Address	Modbus Register Address	Description	I/O Range		Holding Register Representation	
			Min	Max	Min (dec)	Max (dec)
45202	42403	Z-Axis RMS Velocity (mm/sec) <sup>2, 5</sup>	0	65.535	0	65535
45203	40049	Temperature (°F) <sup>3</sup>	-327.68	327.67	-32768	32767
45204	40043	Temperature (°C) <sup>3</sup>	-327.68	327.67	-32768	32767
45205	42451	X-Axis RMS Velocity (in/sec) <sup>1, 5</sup>	0	6.5535	0	65535
45206	42453	X-Axis RMS Velocity (mm/sec) <sup>2, 5</sup>	0	65.535	0	65535
45207	42407	Z-Axis Peak Acceleration (G) <sup>2, 6</sup>	0	65.535	0	65535
45208	42457	X-Axis Peak Acceleration (G) <sup>2, 6</sup>	0	65.535	0	65535
45209	42405	Z-Axis Peak Velocity Component Frequency (Hz) <sup>4, 5</sup>	0	6553.5	0	65535
45210	42455	X-Axis Peak Velocity Component Frequency (Hz) <sup>4, 5</sup>	0	6553.5	0	65535
45211	42406	Z-Axis RMS Acceleration (G) <sup>2, 5</sup>	0	65.535	0	65535
45212	42456	X-Axis RMS Acceleration (G) <sup>2, 5</sup>	0	65.535	0	65535
45213	42409	Z-Axis Kurtosis <sup>2, 6</sup>	0	65.535	0	65535
45214	42459	X-Axis Kurtosis <sup>2, 6</sup>	0	65.535	0	65535
45215	42408	Z-Axis Crest Factor <sup>2, 6</sup>	0	65.535	0	65535
45216	42458	X-Axis Crest Factor <sup>2, 6</sup>	0	65.535	0	65535
45217	42402	Z-Axis Peak Velocity (in/sec) <sup>1, 5</sup>	0	6.5535	0	65535
45218	42404	Z-Axis Peak Velocity (mm/sec) <sup>2, 5</sup>	0	65.535	0	65535
45219	42452	X-Axis Peak Velocity (in/sec) <sup>1, 5</sup>	0	6.5535	0	65535
45220	42454	X-Axis Peak Velocity (mm/sec) <sup>2, 5</sup>	0	65.535	0	65535
45221	42410	Z-Axis High-Frequency RMS Acceleration (G) <sup>2, 6</sup>	0	65.535	0	65535
45222	42460	X-Axis High-Frequency RMS Acceleration (G) <sup>2, 6</sup>	0	65.535	0	65535
	46101	Baud	0=9.6k, 1=19.2k (default), 2=38.4k			
	46102	Parity	0=none (default), 1=odd, 2=even			
	46103	Modbus Slave Address	1 (default) through 247			
	42601	Rotational Speed (RPM) (default = 1725 RPM) -- Used in vibration spectral band measurements	0	65535	0	65535
	42602	Rotational Speed (Hz) (default = 29 Hz) -- Used in vibration spectral band measurements	0	65535	0	65535

<sup>1</sup> Value = Register value ÷ 10000  
<sup>2</sup> Value = Register value ÷ 1000  
<sup>3</sup> Value = Register value ÷ 100

<sup>4</sup> Value = Register value ÷ 10  
<sup>5</sup> Measurement bandwidth = 10 Hz to 1 kHz  
<sup>6</sup> Measurement bandwidth = 1 kHz to 4 kHz

## Vibration Spectral Band Measurements

To use vibration spectral band measurements, follow the instructions in the Vibration Spectral Band Measurement Start Guide (p/n [b\\_4510565](#)).

## Specifications

### Supply Voltage

10 to 30 V dc

### Current

Active comms: 9 mA at 30 V dc

### Communication

Interface: RS-485 serial  
 Baud rates: 9.6k, 19.2k (default), or 38.4k  
 Data format: 8 data bits, no parity (default), 1 stop bit (even or odd parity available)  
 Protocol: Modbus RTU

### Vibration Sensor

Measuring Range: 0 to 46 mm/sec or 0 to 1.8 in/sec RMS  
 Frequency Range: 10 Hz to 4 kHz  
 Accuracy: ±10% at 25 °C  
 Sampling Frequency: 20 kHz (default)  
 Record Length: 8192 points (default)  
 Sample Duration: 0.4 s (default)

**Mounting Options**

The sensor can be mounted using a variety of methods, including M4 x 0.7 hex screw, epoxy, thermal tape, or magnetic mount.

**Mechanical Shock**

MIL-STD-202G, Method 213B, Condition I (100G 6x along X, Y and Z axes, 18 shocks), with device operating

**Certifications**



**Temperature Sensor**

Measuring Range: -40 °C to +105 °C (-40 °F to +221 °F)

Resolution: 1 °C

Accuracy: ± 3 °C

Operating the sensor at higher voltages can induce internal heating that can reduce the accuracy.

**Environmental Rating**

Stainless steel model: IP69K per DIN 40050-9

Aluminium model: IEC IP67

**Operating Temperature**

-40 °C to +105 °C (-40 °F to +221 °F) <sup>1</sup>

**Dimensions**

All measurements are listed in millimeters [inches], unless noted otherwise.

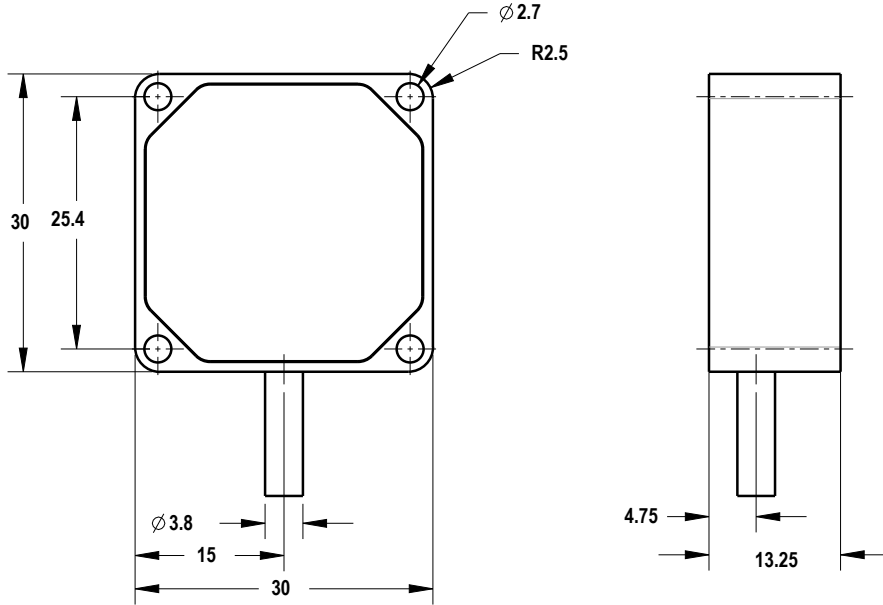


Figure 1. Aluminium model

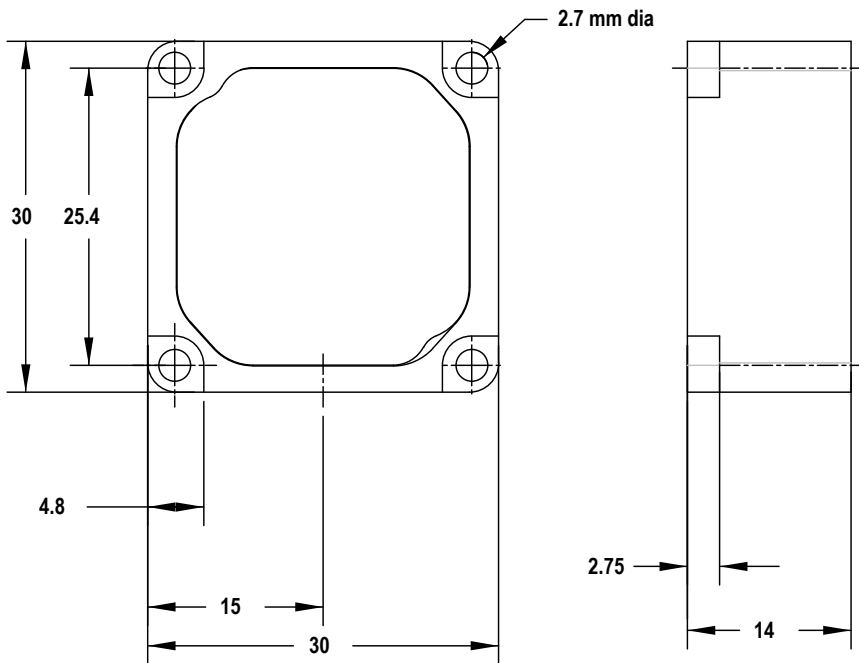


Figure 2. Stainless steel models

<sup>1</sup> Operating the devices at the maximum operating conditions for extended periods can shorten the life of the device.