

S3-D16

S3 Vibration Sensor

\$1,399.00 1399.00
In stock

S3-D16

The S3-D16 is a vibration recorder with additional environmental sensors. This model's low cost makes it ideal for general purpose vibration testing.

Product Add-On: [Mounting Kit \(\\$30\)](#)
Application Areas

Develop a Shock, Vibration and Environment Profile with ease & confidence for your specific application!
Take a deep dive of our [applications](#) pages for specific application resources.

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- [Wi-Fi Enabled Wireless Monitoring](#)
- [Environmental Testing](#)

Accelerometer Specifications >> [More Information](#)
enDAQ S3-D16 Accelerometer Technical Specifications

Accelerometer Type	Range	Sampling Rate	Bandwidth	Noise	Resolution
Digital Capacitive	± 16g	3,200 Hz	0 to 300 Hz	< 0.01 gRMS	0.004 g

Frequency Response Plot

Additional Sensor Specifications >> [More Information](#)

Sensor	Measurement Range	Resolution	Sampling Rate
Magnetometer	± 1300 µT	0.3 µT	0 (off) to 10 Hz
Temperature	-40 to 85 °C	0.01 °C	0 (off) to 10 Hz
Pressure	1 to 200 kPa	1.6 Pa	0 (off) to 10 Hz
Humidity	0 to 100 %RH	0.04% RH	0 (off) to 10 Hz
Light	0 to > 20 uV	<100 mlx	0 (off) to 4 Hz

Environmental Specifications >> [More Information](#)

Parameter	Range	Notes
Operating Temperature	-10°C to 55°C (14°F to 131°F)	Recharging Temperature 0°C to 45°C (32°F to 113°F)
Recommended Storage Temperature	0°C to 25°C (32°F to 77°F) - Up to 1 Year	Up to 1 Month: -10°C to 45°C (14°F to 113°F). Up to 3 Months: -10°C to 40°C (14°F to 104°F)
Humidity	0 to 95 %RH	Non-Condensing
Pressure	20 kPa to 110 kPa (2.9 psi to 16.0 psi)	Absolute Pressure
Shock Limit	>3,000 g	Refer to Shock Report (PDF)
No Electric Field Susceptibility	2 MHz to 18 GHz @ 200 V/m	Refer to EMI Test Report (PDF)
No Magnetic Field Susceptibility	30 Hz to 100 kHz	Refer to EMI Test Report (PDF)

Battery & Storage Performance >> [Battery Life Estimator](#) >> [Battery Specifications](#)
Battery performance is heavily dependent upon the device configuration (sensor sample rates and triggers), battery age

(including charging cycles), and temperature. The following table provides the battery life and storage capacity of this device assuming it has a relatively new battery and it is at room temperature. When showing performance it assumes all sensors are on at the default sample rate with the main accelerometer sample rate driving performance. With triggers, it assumes the device is in trigger mode 99% of the time. Here are some additional resources: [Measurement Settings](#), [Battery Specifications](#), [NEW! Battery Life Estimator Tool](#).

Sample Rate	Storage Capacity	Continuous Recording	Main Accel. Trigger	2nd Accel. Trigger	Periodic/Time Trigger
50 Hz	8 days	17 hours	53 hours		64 days
200 Hz	5 days	17 hours	53 hours		64 days
800 Hz	45 hours	16 hours	53 hours		60 days
3,200 Hz	13 hours	13 hours	52 hours		52 days

Dimensions >> [Download CAD Model](#)

Mechanical Specifications >> [Mounting](#)

Mass	40 grams
Case Material	Polycarbonate
Mounting - Screw	4-40 Bolts (70 in-oz)
Mounting - Tape (Double Sided)	3M 950 Tape
Length	76.2 mm (3.00")
Width	29.8 mm (1.18")
Thickness	15.0 mm (0.59")
Ingress Protection	IP 50 (Dust Protected)

Free Software Features >> [More Information](#)

[enDAQ LAB](#)

Completely self-contained software application - no drivers or installation required.

- Configures enDAQ sensors
- Basic Reporting Capabilities
- View multiple sensor channels concurrently
- Quick Snapshot of data from enDAQ sensors
- Batch export and convert data

[>> Get Started](#)

[enDAQ CLOUD](#)

Upload raw data directly to the Cloud to generate standard and advanced custom reports.

- Pre-Configured Standard Reports
- Advanced Analysis Metrics
- API Access
- 100 GB Storage
- Unlimited Custom Alerts

[>> Get Started](#)

[Open Source Python Libraries](#)

Provides the functionality to adapt analysis and give you the exact data you need for your specific application.

- Directly Load & Parse data from IDE files
- Generate power spectral densities (PSD) and shock response spectra (SRS)
- Double integrate into velocity & displacement and resample data

[>> Get Started](#)

