LOG-0002-100G-DC-8GB-AL

The Slam Stick X is a vibration and shock recorder with a high performance piezoelectric accelerometer, a secondary capacitive accelerometer and other environmental sensors. This model is most popular for general purpose testing because of its wide application range. Its aluminum enclosure improves reliability in harsh environments and widens its frequency response.

It has been discontinued and replaced by the S4-E100D40. There are also many other new and updated products you can compare on our sensors page. If you have any questions, we're here to help!

Why enDAQ?
Demo with an Engineer
Visit our Help Center
Customer Testimonials
Contact Customer Success

PLEASE NOTE: BACKORDERED PRODUCTS:
Due to the global chip shortage, some of our products are on backorder. We sincerely apologize for the inconvenience and are working tirelessly to transition to a more readily available microprocessor. In the meantime, if you have any questions, please do not hesitate to reach out to our Customer Success Team.

Complimentary enDAQ Pelican case included with every enDAQ® sensor order.
Additional cases can be purchased here: enDAQ Accessories

Product Features

Convenient
- Standalone measurement system with sensors, storage & rechargeable battery
- Handheld form factor
- Setup in minutes over USB interface

Adaptable
- Multiple accelerometers for dynamic range
- Many additional embedded sensors into single system
- User-programmable wake-up conditions and sample rates

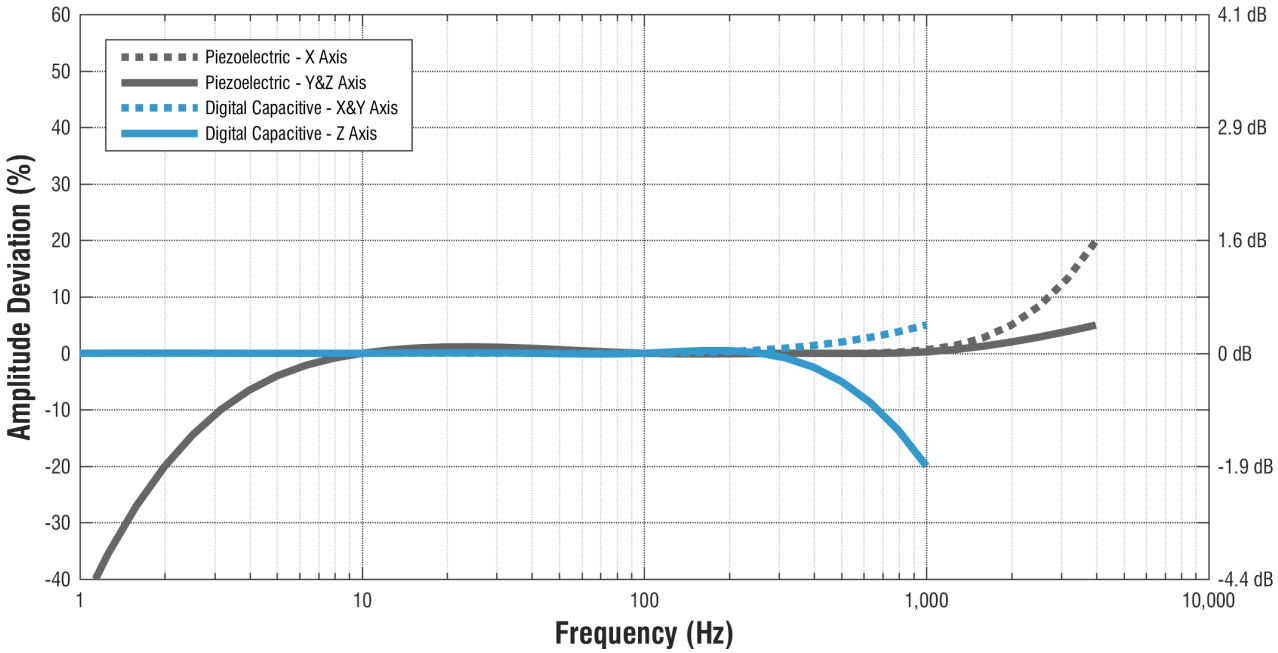
Reliable
- Trusted in harsh environments by over 2,000 customers & the US Navy
- Calibrated with NIST Traceable Accelerometer | Benefits | Calibration Certificate
- Storage capacity for billions of data points

Accelerometer Specifications >> More Information

Accelerometer Type	Range	Sampling Rate	Bandwidth	Noise	Resolution
Piezoelectric	± 100g	20,000 Hz	5 to 2,000 Hz	< 0.04 gRMS	0.003 g
Digital Capacitive	± 16g	3,200 Hz	0 to 300 Hz	< 0.01 gRMS	0.004 g

Please note: *Piezoelectric accelerometers are susceptible to saturation due to exposure to high frequency events because they are AC coupled. If your application will have high frequency events (events with pulse widths less than 1 ms) we recommend checking out our S-R series products.*
Find out more in our Piezoelectric Accelerometers Blog Post

Frequency Response Plot



Additional Sensor Specifications >> More Information

Sensor	Measurement Range	Resolution	Sampling Rate
Gyroscope	2000°/s	0.06 °/s	0 (off) to 200 Hz
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

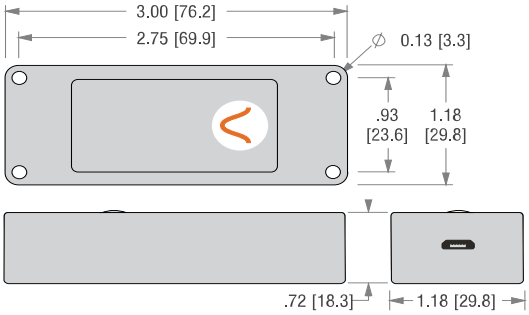
Parameter	Range	Notes
Operating Temperature	-10°C to 80°C (14°F to 176°F)	
Recommended Storage Temperature	15°C to 30°C (59°F to 86°F)	Recharging Temperature 0°C to 45°C (32°F to 113°F)
Humidity	0 to 95 %RH	Non-Condensing
Pressure	20 kPa to 110 kPa (2.9 psi to 16.0 psi)	Absolute Pressure
Shock Limit	>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 Specifications >> Battery Life Estimator

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, Battery Life Estimator Tool.

Sample Rate	Storage Capacity	Continuous Recording	Main Accel. Trigger	2nd Accel. Trigger	Periodic/Time Trigger
100 Hz	22 days	16 hours	17 hours	65 hours	65 days
1,000 Hz	9 days	15 hours	17 hours	65 hours	61 days
5,000 Hz	63 hours	12 hours	17 hours	64 hours	47 days
20,000 Hz	17 hours	6 hours	16 hours	62 hours	25 days

Dimensions>> Download CAD Model



Mechanical Specifications [>> Mounting]

Mass	65 grams
Case Material	Aluminum 7075
Mounting - Screw	4-40 Bolts (100 in-oz)
Mounting - Tape (Double Sided)	3M 950 Tape
Length	76.2 mm (3.00")
Width	29.8 mm (1.18")
Thickness	18.3 mm (0.72")
Ingress Protection	IP 50 (Dust Protected)

Free Software Features[>> More Information]

- **Free Standalone Software Packages**
  Lab - Configuration, Quick Snapshot, Batch File Conversion
  Analyzer - Analysis of enDAQ Sensor Data in MATLAB
- **Configure Sensors for Measurement**
- **Export/Convert Data to CSV or MATLAB**
- **Analysis**
  FFT
  PSD
  Spectogram
  Digital Filtering