

LOG-0002-025G-DC-8GB-PC

The Slam Stick X is a vibration recorder with a high performance piezoelectric accelerometer, a secondary capacitive accelerometer and other environmental sensors. This model is most popular for vibration testing.

It has been discontinued and replaced by the <u>S3-E25D40</u>. There are also many other new and updated products you can compare on <u>our sensors</u> page. If you have any guestions, we're here to help!

Why enDAQ?
Demo with an Engineer
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Customer Testimonials
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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 <u>Customer Success</u> Team.



Complimentary enDAQ Pelican case included with every <u>enDAQ® sensor</u> 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 | <u>Benefits</u> | <u>Calibration</u> <u>Certificate</u>
- Storage capacity for billions of data points

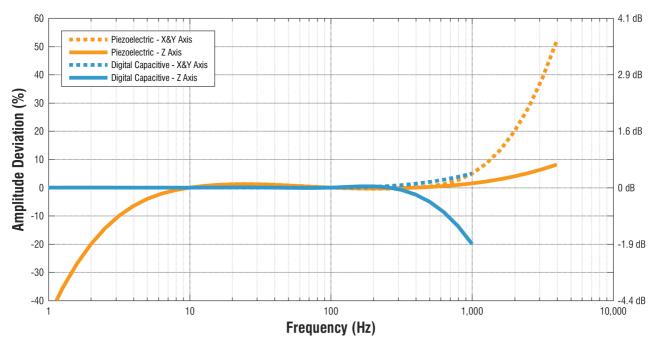
Accelerometer Specifications>> More Information

Accelerometer Type Range Sampling Rate Bandwidth Noise Resolution Piezoelectric \pm 25g 20,000 Hz 5 to 1,000 Hz < 0.01 gRMS 0.0008 g Digital Capacitive \pm 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 <u>S-R series</u> products. Find out more in our <u>Piezoelectric Accelerometers</u> 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 μΤ	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 Notes

-10°C to 80°C (14°F to 176°F) Operating Temperature

Recommended Storage Recharging Temperature 0°C to 45°C (32°F 15°C to 30°C (59°F to 86°F)

Temperature to 113°F)

Humidity 0 to 95 %RH Non-Condensing

20 kPa to 110 kPa (2.9 psi to Pressure Absolute Pressure

16.0 psi)

Shock Limit >3,000 qRefer to Shock Report (PDF)

No Electric Field Susceptibility 2 MHz to 18 GHz @ 200 V/m Refer to EMI Test Report (PDF)

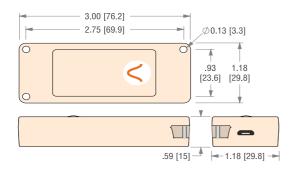
No Magnetic Field 30 Hz to 100 kHz Refer to EMI Test Report (PDF) Susceptibility

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	13 hours	13 hours	52 hours	52 days		
1,000 Hz	9 days	12 hours	13 hours	52 hours	49 days		
5,000 Hz	63 hours	9 hours	13 hours	52 hours	38 days		
20,000 Hz	17 hours	5 hours	13 hours	49 hours	20 days		
Dimensions >> Download CAD Model							





Mechanical Specifications >> Mounting

Mass40 gramsCase MaterialPolycarbonateMounting - Screw4-40 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

Free Standalone Software Packages <u>Lab</u> - Configuration, Quick Snapshot, Batch File Conversion <u>Analyzer</u> - Analysis of enDAQ Sensor Data in MATLAB

- Configure Sensors for Measurement
- Export/Convert Data to CSV or MATLAB
- Analysis

FFT PSD

Spectogram

Digital Filtering

