

CRY437

1 Axis, 10mV/G, High-G, IEPE Accelerometer, Miniature, Overall Cable

Features

- **Key Specifications**

Sensitivity	10 mV/g
Frequency Response	2Hz to 8 kHz (± 1 dB)
Measuring Range	± 500 g pk

- **Applications**

Universal measurements
 Industrial vibration measurements
 Measurements in confined spaces
 Measurements on delicate structures

Introduction

CRY437 is a miniature single - axis acceleration sensor. The output mode is through the overall side connection (L5), and it is installed on the object in a glued way. It can be used to measure small movements in laboratory and scientific research, and can also be used to monitor the vibration state of industrial equipment online.

The small volume of CRY437 makes it an excellent choice for measurements in limited spaces and fine structures.

Highlights

- **Applications of High-G Accelerometer**

High-g accelerometers are used to measure extreme acceleration changes, such as in collision and impact testing, aircraft and car acceleration, ballistic testing, and more. They can capture these huge acceleration changes and provide reliable data support.

- **Compatibility**

The IEPE accelerometer is a PE charge accelerometer with an integrated preamplifier with an output signal in the form of a low-impedance voltage output that can be matched to a common coaxial cable.

IEPE is a universal constant current source power supply technology used on sensors. Each manufacturer has different names, such as ICP, CCP, etc.

- **Calibration**

Each CRY SOUND accelerometer is calibrated at the factory using traceable calibration equipment. Calibration certificates are provided with each unit. CRY SOUND recommends recalibration at least once a year.

- **Quality & Warranty**

All CRY SOUND accelerometers are made of stainless steel with good corrosion resistance and robustness, suitable for long-term storage.

CRY SOUND preamplifiers are supported by a 1-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Sensitivity	10 mV/g
Frequency Response	2 Hz to 8 kHz (± 1 dB)
Measuring Range (Peak)	± 500 g pk
Transverse Sensitivity	$\leq 5\%$
Amplitude Non-linearity	$\leq \pm 1\%$

Electrical

Output Impedance	$< 100 \Omega$
Excitation Voltage	18 VDC to 28 VDC
Full Scale Output (Peak)	± 5 V
Constant Current	2 mA to 10 mA
Noise	$< 100 \mu\text{V}$
Bias Voltage	11 V \pm 13 V

Environmental

Max Shock Protection	± 2000 g
Operating Temperature	-40 °C to +120 °C

Physical

Connector Type	Overall cable (10-32UNF)
Mounting Threads	Glue
Sensing Structure	Shear Mode
Case Materials	304 Stainless Steel
Sensing Element	PZT-5
Level of Protection	IP65
Weight	2 g (Excluded Cable)

Frequency Response

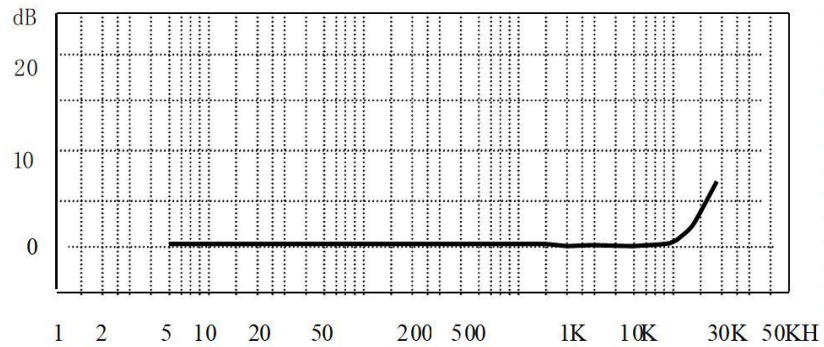


Fig.1 CRY437 Accelerometer Typical Frequency Response

Drawings(mm) [inch]

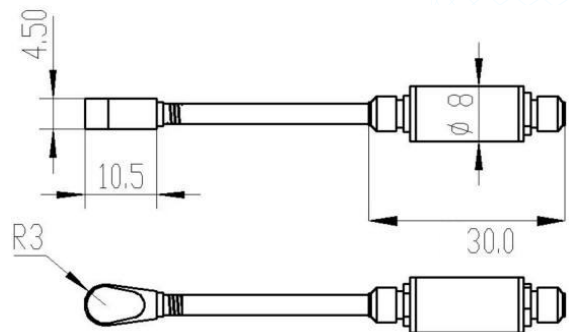


Fig.2 CRY437 Accelerometer Drawings

Dimensions

Length	10.5 mm (0.413")
Height	4.5 mm (0.177")

Ordering Information

Optional Accessories

Cable	Overall cable to 10-32UNF (M5) to BNC 2 m cable
-------	---

Related Products

CRY431	1 Axis, high-g, IEPE accelerometer 5 mV/g, top 10-32UNF connector
CRY433	1 Axis, high-sensitivity, IEPE accelerometer, 100 mV/g, top 10-32UNF connector
CRY441	1 Axis, high-g charge accelerometer, 5pC/ g, miniature, side 10-32UNF connector
CRY446	Triaxial, high-g, IEPE accelerometer, 10 mV/g, miniature, side connector

