



# CRY433

## IEPE Accelerometer, High-sensitivity ,Top connector

### Features

- **Key Specifications**

Sensitivity	100 mV/g
Frequency Response	0.5 Hz to 8 kHz ( $\pm 1$ dB)
Measuring Range	$\pm 50$ g pk

- **Applications**

Universal measurements  
High precision measurements  
Industrial vibration measurements

### Introduction

CRY433 is a uniaxial acceleration sensor. The output mode is top M5 and it is installed on an object through an M5 bolt.

CRY433 can be used to measure tiny motions in laboratories and scientific research. It can also be used to monitor the vibration status of industrial equipment online. It can be equipped with armored shielded cables for measuring vibration parameters such as acceleration, velocity and displacement in strong interference environments such as industry and power.

### Highlights

- **Applications of High-sensitivity Accelerometer**

High-sensitivity accelerometers can detect small changes in acceleration, providing accurate and reliable acceleration data for the early small fault vibration monitoring of industrial equipment and laboratory scientific research.

- **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

### Dynamic Characteristics

Sensitivity	100 mV/g
Frequency Response	0.5 Hz to 8 kHz ( $\pm 1$ dB)
Measuring Range (Peak)	$\pm 50$ g pk
Transverse Sensitivity	$\leq 5\%$

### Electrical Characteristics

Output Impedance	$< 100 \Omega$
Excitation Voltage	18 VDC to 28 VDC
Full Scale Output (Peak)	$\pm 5$ V
Constant Current	2 mA to 10mA
Noise	$< 50 \mu\text{V}$
Bias Voltage	9 V to 12 V

### Environmental Characteristics

Max Shock Protection	$\pm 3000$ g
Operating Temperature	$-40^\circ\text{C}$ to $+120^\circ\text{C}$

### Physical Characteristics

Connector Type	Top M5
Threaded Interface	M5
Sensing Structure	Shear Mode
Case Materials	304 Stainless Steel
Sensing Element	PZT-5
Weight	13g

### Frequency Response

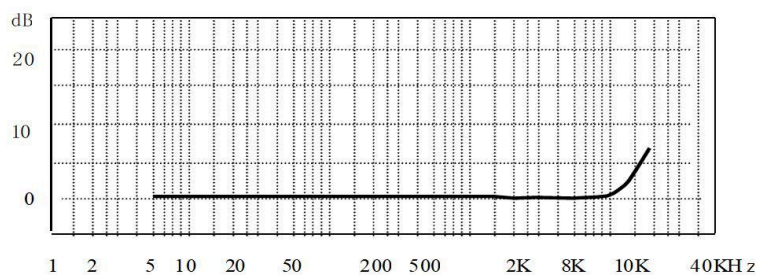


Fig.1 CRY433 Accelerometer Typical Frequency Response

### Drawings(mm)[inch]

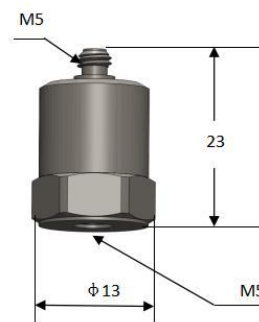


Fig.2 CRY433 Accelerometer Drawings

### Dimensions

Height	23mm(0.905")
Diameter	13mm(0.512")

## Ordering Information

### Optional Accessories

Cable	M5 to BNC cable/2m
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### Related Products

CRY431	1 Axis, high-g, IEPE accelerometer 5 mV/g, top M5 connector
CRY434	1 Axis, high-sensitivity, IEPE accelerometer, 100 mV/g, side M5 connector
CRY441	1 Axis, high-g charge accelerometer, 5pC/ g, miniature, side M5 connector
CRY446	Triaxial, high-g, IEPE accelerometer, 10 mV/ g, miniature, side connector