



# **CRY434**

# IEPE Accelerometer, Highsensitivity, Side Connector

### **Features**

#### • Key Specifications

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

#### Applications

Universal measurements
High precision measurements
Industrial vibration measurements

### Introduction

CRY434 is a uniaxial acceleration sensor. The output mode is M5 on the side end and it is installed on an object through an M5 bolt.

CRY434 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 CRYSOUND accelerometer is calibrated at the factory using traceable calibration equipment. Calibration certificates are provided with each unit. CRYSOUND recommends recalibration at least once a year.

#### Quality & Warranty

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

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



# **Technical Specifications**

<b>Dynamic Characteristics</b>	
Sensitivity	100 mV/g
Frequency Response	0.5 Hz to 8 kHz (±1 dB)
Measuring Range (Peαk)	±50g pk
Transverse Sensitivity	≤5%
<b>Electrical Characteristics</b>	
Output Impedance	<100 Ω
Excitation Voltage	18 VDC to 28 VDC
Full Scale Output (Peak)	±5 V
Constant Current	2 mA to 10mA
Noise	< 50 uV
Bias Voltage	9 V to 12 V
<b>Environmental Character</b>	istics
Max Shock Protection	±3000 g
Operating Temperature	-40 °C to +120 °C
Physical Characteristics	
Connector Type	Side M5
Threaded Interface	M5
Sensing Structure	Shear Mode
Case Materials	304 Stainless Steel
Sensing Element	PZT-5
Weight	13g

### **Frequency Response**

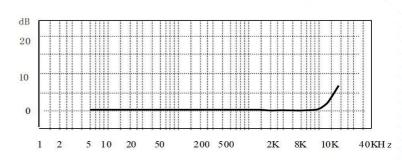


Fig.1 CRY434 Accelerometer Typical Frequency Response

### Drawings(mm)[inch]

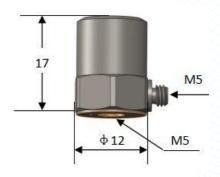


Fig.2 CRY434 Accelerometer Drawings

#### **Dimensions**

**Related Products** 

Height	17 mm(0.669")	
Diameter	12 mm(0.472")	

# **Ordering Information**

M5 to BNC cable/ 2m

CRY431	1 Axis, high-g, IEPE accelerometer 5 mV/g, top M5 connector
CRY433	1 Axis, high-sensitivity, IEPE accelerometer, 100 mV/g, top 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