



CRY445

Triaxial IEPE Accelerometer, , High-sensitivity, Side 4-Pin Connector

Features

- **Key Specifications**

Sensitivity	100 mV/g
Frequency Response	1 Hz to 4 kHz (± 1 dB)
Measuring Range	± 80 g pk

- **Applications**

Industrial vibration measurements
High sensitivity measurements

Introduction

CRY445 is a three-axis acceleration sensor. The output mode is M12*1 (4 pin). It is installed on an object through an M5 bolt and is often used for online monitoring of the vibration status of industrial equipment.

CRY445 can be used with armored shielded cables for measuring parameters such as acceleration, velocity, and displacement under strong interference conditions such as in 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	1 Hz - 4 kHz (± 1 dB) 0.5Hz - 8kHz (± 3 dB)

Measuring Range (Peak) ± 80 g pk

Transverse Sensitivity $\leq 5\%$

Amplitude Non-linearity $\leq \pm 1\%$

Electrical Characteristics

Output Impedance $< 100 \Omega$

Excitation Voltage 18 VDC to 28 VDC

Full Scale Output (Peak) ± 8 V

Constant Current 2 mA to 10mA

Background Noise $< 200 \mu V$

Bias Voltage 10V - 14V

Install Ground Insulation $10^8 \Omega$

Environmental Characteristics

Max Shock Protection ± 1000 g

Operating Temperature -40°C to $+120^\circ \text{C}$

Physical Characteristics

Connector Type Side M12, 4-Pin

Threaded Interface M5

Sensing Structure Shear Mode

Case Materials 304 Stainless Steel

Level of Protection IP65

Weight 95g

Drawings(mm)[inch]

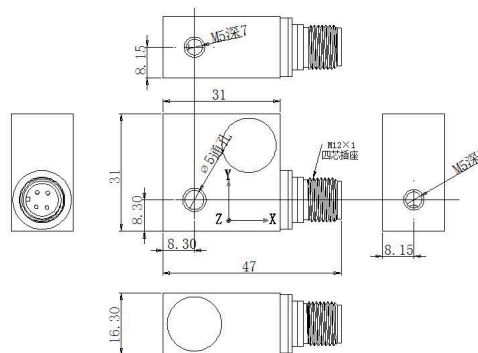


Fig.1 CRY445 Accelerometer Drawings

Related Products

CRY431	1 Axis, high-g, IEPE accelerometer 5 mV/g, top M5 connector
CRY437	1Axis, high-g, IEPE accelerometer, 10 mV/ g, miniature, overall cable
CRY446	Triaxial, high-g, IEPE accelerometer, 10 mV/ g, miniature, side connector

CRY445 Accelerometer, 10 mV/g, miniature, side connector

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Ordering Information

Optional Accessories

Cable	M12 4-p plug shielded cable/5m
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