



CRY441

Miniatur Charge Accelerometer, High-G, Side Connector

Features

- **Key Specifications**

Sensitivity	5 pC / g
Frequency Response	1 Hz to 10 kHz (± 1 dB)
Measuring Range	$\pm 2500g$ pk

- **Applications**

Universal measurements
Industrial vibration measurements
Measurements in confined spaces
High dynamic range measurements

Introduction

CRY441 is a uniaxial charge acceleration sensor with an output in the form of M5. 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.

CRY441 can be equipped with armored shielded cables to measure vibration parameters such as acceleration, velocity, and displacement under strong interference conditions such as industrial and electric

Highlights

- **Applications of High-G Accelerometer**

High-g accelerometers are used to measure high-amplitude vibration, 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 charge accelerometer uses the piezoelectric effect of piezoelectric crystal to convert the acceleration into a measurable amount of charge, and then realizes the measurement of acceleration. The CRY SOUND charge-type piezoelectric accelerometer is robust and has a high dynamic range for vibration measurement under harsh conditions.

- **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	5pC/g
Frequency Response	1 Hz to 10 kHz (± 1 dB)
Measuring Range (Peak)	± 2500 g pk

Transverse Sensitivity	$\leq 5\%$
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Electrical Characteristics

Capacitance	~ 400 PF
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Insulation Resistance	$> 10^9 \Omega$
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Polarity	Positive Electrode
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Environmental Characteristics

Max Shock Protection	± 10000 g
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Operating Temperature	$-54^\circ\text{C} \sim +150^\circ\text{C}$
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Physical Characteristics

Connector Type	Side M5
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Threaded Interface	M3
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Sensing Structure	Shear Mode
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Case Materials	304 Stainless Steel
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Sensing Element	PZT-5
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Weight	7.5 g
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Frequency Response

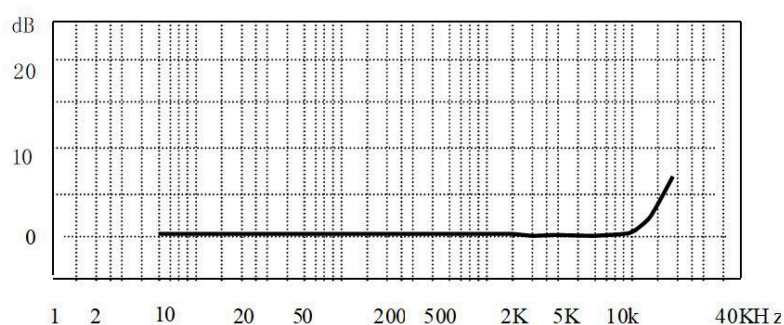


Fig.1 CRY441 Accelerometer Typical Frequency Response

Drawings(mm)[inch]

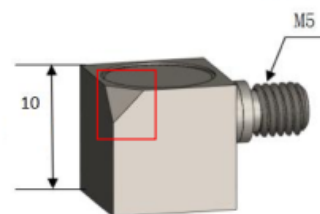


Fig.2 CRY441 Accelerometer Drawings

Ordering Information

Optional Accessories

Cable	M5 to M5 cable / 2m
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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