



CRY3261-S01

1/2" Free-Field, Prepolarized, Ultra-low noise Microphone Set

Features

Key Specifications

Nominal Sensitivity Dynamic Range Frequency Range 354 mV/Pa 7.5 dB to 115 dB 3.15 Hz to 20 kHz ±3 dB

Applications

Anechoic chamber test Product self-noise Environmental noise test

Standards

IEC 61094 4:1995 Measurement microphones - Part 4

Components

CRY3261 1/2" Free-field Prepolarized Microphone CRY516 1/2" Low-noise Preamplifier CRY575L Two-channel Microphone Power Supply

Introduction

The CRY3261-S01 is a 1/2" free field prepolarization measurement microphone and preamplifier set that is widely used in acoustic test environments such as anechoic and quiet rooms. It has extremely low self-noise, making it ideal for detecting and measuring ultra-low noise levels. Typical applications include measuring product self-noise, computer fan noise, transformer current noise, and evaluating environmental noise.

Highlights

Use of Ultra-low noise Free-field Microphones

Ultra-low noise microphone sets have very low internal noise, allowing them to conduct acoustic measurements without significantly adding to the background noise. Free-field microphone sets are specifically designed for measurements in environments that are free from reflections or echoes and are widely used in fields such as acoustic research, noise monitoring, and sound system testing.

Compatibility

The CRY3261-S01 microphone set uses a BNC interface coaxial cable for output and is compatible with most capture cards on the market.

The power supply interface uses a USB Type-C port and can be widely compatible with power supply devices.

Calibration

Each CRYSOUND microphone set 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 microphone capsules use 3rd generation titanium diaphragms and protection grids and synthetic sapphire insulators – resulting in the most rugged and reliable measurement microphones on the market. Titanium provides superior corrosion resistance, high temperature stability, impact resistance and strength-tomass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality.

CRYSOUND microphones and preamplifiers are supported by a 10-year warranty—offering one of the best service guarantee in the world.



Technical Specifications

| Field Type | Free-field |
|----------------------------|---|
| Sensitivity(±1.5 dB) | 354 mV/Pa, -9 dB re 1V/Pa |
| Frequency Response | 3.15 Hz to 20 kHz ±3 dB |
| Polarization Voltage | 0 V |
| Dynamic Range(re.20uPa) | 7.5 dB(typical: 6.5) to 115dB |
| Inherent noise | 7.5 dBA |
| Operating Temperature | -20°C to +60°C (-4°F to +140°F) |
| Temperature Stability | 0.012 dB/°C (-10°C to +50°C) 0.008 dB/°F (+14°F to +122°F) |
| Static Pressure Stability | -0.01 dB/kPa |
| Humidity Range | 0 to 90%RH no condensation |
| Humidity Stability | < 0.1 dB (0 to 90%RH no condensation) |
| Pressure Equalization Vent | Rear vented |
| IEC 61094-4 Type | WS2F |
| Output Impedance | < 20 Ω |
| Maximum Output Voltage | > 5.0 Vrms |
| DC Bias Voltage | 5 V |
| CRY575L Interface Type | DB9 (Input) BNC (Output) |

Frequency Response

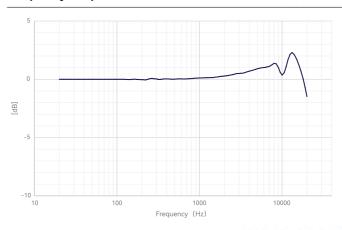


Fig.1 CRY3261-S01 Microphone Set Typical Frequency Response

Dimensions

| Height with Grid | 85 mm (3.346") | |
|--------------------|-----------------|--|
| Diameter with Grid | 13.2 mm (0.52") | |

Drawings(mm)[inch]

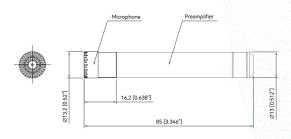


Fig.2 CRY3261-S01 Microphone Set Drawings

Ordering Information

| Consisting of | | |
|------------------------|--|--|
| Measurement Microphone | CRY3261 1/2" Free-field Prepolarized Microphone | |
| Preamplifier | CRY516 Low-noise Preamplifier | |
| Power Supply | CRY575L Two-channel Microphone Power Supply | |
| Cable | BL5008 aircraft 4-core bending connector to DB9 / 1.6m | |

Related Products

| CRY3101-S01 | 1" free-field prepolarized low-noise microphone set, 50 mV/Pa, 4 Hz-16kHz, 12 dB-138dB |
|-------------|--|
| CRY3201-S01 | 1/2" free-field prepolarized high- frequency microphone set, 12.5 mV/Pa, 3.15 Hz-40 kHz, 23 dB-150dB |
| CRY3203-S02 | 1/2" free-field prepolarized high- sensitivity microphone set, 50 mV/Pa, 3.15 Hz-20kHz, 15 dB-138 dB |
| CRY3401-S01 | 1/4" free-field prepolarized low-noise microphone set, 15.8 mV/Pa, 4 Hz-40 kHz, 26dB-148 dB |