



# CRY3203-S02

## 1/2" Free-field Prepolarized High-sensitivity Microphone Set

### Features

- **Key Specifications**

Nominal Sensitivity	-26 ±1.5dB re 1V/Pa
Dynamic Range	16dBA to 132dB
Frequency Range	3.15Hz to 20kHz ±2dB

- **Applications**

Anechoic chamber test  
Electroacoustic test  
Noise test

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

- **Components**

CRY3203 1/2" Free-field Prepolarized Microphone  
CRY3503 1/2" IEPE Preamplifier

### Introduction

CRY3203-S02 is a free-field prepolarized microphone and preamplifier set widely used in acoustic testing environments, such as anechoic chambers and quiet rooms. Its frequency response range matches the auditory frequency range of the human ear, making it highly suitable for noise detection. Additionally, it is also widely applicable in various fields including electroacoustic measurements, audio measurements, and acoustical research.

### Highlights

- **Use of High-sensitivity Free-field Microphones**

High-sensitivity microphone sets have a broad measurement frequency range and are applicable to a variety of measurement scenarios. 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**

CRY SOUND microphone set requires a constant current input module capable of delivering 4mA and 24V unloaded IEPE voltage supply. IEPE is a universal constant current source power supply technology used on sensors. Each manufacturer has different names, such as ICP, CCP, etc.

- **TEDS Microphone Set**

Supports TEDS, and TEDS programmed to the IEEE 1451.4 standard for SMART transducers, V 1.0 format.

- **Calibration**

Each CRY SOUND microphone set 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 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-to-mass than traditional nickel and stainless steel. All capsules are assembled in strict clean-room environments for maximum quality. CRY SOUND microphones and preamplifiers are supported by a 10-year warranty—offering one of the best service guarantee in the world.

# Technical Specifications

## Specifications

Field Type	Free-field
Nominal Sensitivity	50mV/Pa, -26 ±1.5dB re 1V/Pa
Frequency Response	3.15Hz to 20kHz ±2dB
Polarization Voltage	0V
Dynamic Range(re.20uPa)	16dBA to 132dB
Operating Temperature	-30 to +70°C (-22 to +158°F)
Temperature Stability	0.012dB/°C (-10 to +50°C) 0.007dB/°F (14 to 122°F)
Static Pressure Stability	-0.01dB/kPa
Operating Humidity Range	0 to 90%RH no condensation
Humidity Stability	< 0.1dB (0 to 90%RH no condensation)
Pressure Equalization Vent	Rear vented
IEC 61094-4 Type	WS2F
Output Impedance	<20Ω
Maximum Output Voltage	>5.0Vrms
Current Source	IEPE (2mA to 10mA)
Typical Operating Current	4mA
Interface Type	Microdot(M5 10-32UFN)

## Ordering Information

### Consisting of

Measurement Microphone	CRY3203 1/2" Free-field Prepolarized Microphone
Preamplifier	CRY3503 1/2" IEPE Preamplifier
Cable	Microdot to BNC Cable /1.5m

### Optional Accessories

Electrostatic Actuator	TA0302 1/2" IEPE Electrostatic Actuator
Power Supply	CRY575 Three-channel Microphone Power Supply
Cable	Microdot to BNC Cable /0.6m

## Frequency Response

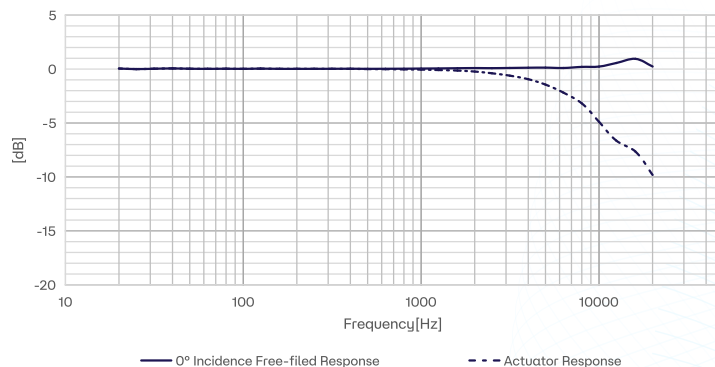


Fig.1 CRY3203-S02 Microphone Set Typical Frequency Response

## Dimensions

Height with Grid 40.2mm (1.58")

Diameter with Grid 13.2mm (0.52")

## Drawings(mm)[inch]

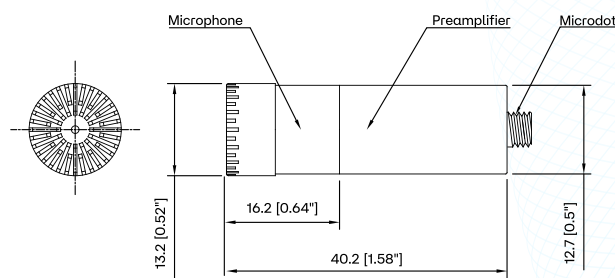


Fig.2 CRY3203-S02 Microphone Set Drawings

## Related Products

CRY3203-S01	1/2" free-field, prepolarized, BNC interface microphone set, widely used in free-field and semi-free-field testing environments.
CRY3101-S01	1" free-field, prepolarized microphone set, primarily used for low-noise test.
CRY3201-S01	1/2" free-field, prepolarized microphone set. It is a classic wide-frequency range set that extends up to the range of 40kHz.
CRY3403-S01	1/4" free-field, prepolarized microphone set. Designed specifically for testing high frequencies and high sound pressure levels.
CRY3261-S01	1/2" free-field, prepolarized microphone set, commonly used for low-noise testing.