



CRY3285

1/2" Free-field External-polarized High-sensitivity Microphone

Features

- **Key Specifications**

Sensitivity	50 mV/Pa
Dynamic Range	16 dBA to 146 dB
Frequency Range	3.15 Hz to 20 kHz ± 2 dB

- **Applications**

Anechoic chamber test
Electroacoustic test
Noise test

- **Standards**

IEC 61094 4:1995 Measurement microphones - Part 4

Introduction

CRY3285 is a 1/2" free field externally polarized measurement microphone that is widely used in acoustic test environments such as anechoic and quiet rooms.

It has a frequency response range that matches the auditory frequency range of the human ear, making it very suitable for noise detection. In addition, it is widely used in various fields such as electroacoustic measurement, audio measurement and acoustic research.

Highlights

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

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

Free-field microphones 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.

- **Calibration**

Each CRY SOUND microphone 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 are supported by a 10-year warranty—offering one of the best service guarantee in the world.

Technical Specifications

Specifications

Field Type	Free-field
Sensitivity(± 1.5 dB)	50 mV/Pa, -26 dB re 1V/Pa
Frequency Response	3.15 Hz to 20 kHz ± 2 dB
Polarization Voltage	200 V
Capacitance	15 pF (@250 Hz)
Dynamic Range(re.20uPa)	16 dBA to 146 dB
Operating Temperature	-30°C to +80°C (-4°F to +140°F)
Temperature Stability	0.010 dB/°C (-10°C to +50°C) 0.006 dB/°F (+14°F to +122°F)
Static Pressure Stability	-0.01 dB/kPa
Operating 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

Dimensions

Height with Grid	16.2 mm (0.64")
Diameter with Grid	13.2 mm (0.52")

Drawings(mm)[inch]

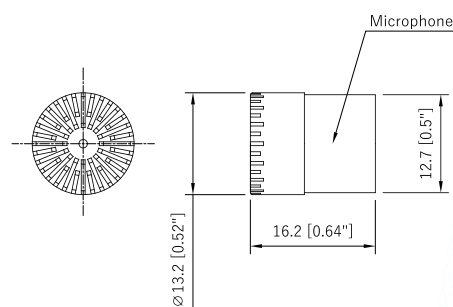


Fig.1 CRY3285 Microphone Drawings

Frequency Response

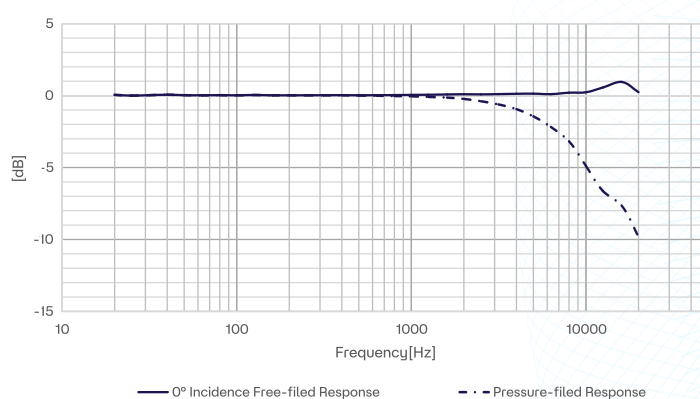


Fig.2 CRY3285 Microphone Typical Frequency Response

Ordering Information

Optional Accessories

Electrostatic Actuator	TA0302 1/2" IEPE Electrostatic Actuator
Power Supply	CRY575 Three-channel Microphone Power Supply
Electroacoustic Analyzer	CRY6151B Electroacoustic Analyzer

Related Products

CRY3281	1/2" free-field ex-polarized high-frequency microphone, 12.5 mV/Pa, 3.15 Hz-40 kHz, 23 dBA-160 dB
CRY3282	1/2" pressure-field ex-polarized wide-frequency microphone, 12.5 mV/Pa, 3.15 Hz-20kHz, 23 dBA-160 dB
CRY3284	1/2" pressure-field ex-polarized high-sensitivity microphone, 50 mV/Pa, 3.15 Hz-10 kHz, 16 dBA-146 dB
CRY3482	1/4" pressure-field ex-polarized ultra-high frequency microphone, 1.6 mV/Pa, 4 Hz-70kHz, 45dB-170 dB
CRY3485	1/4" free-field ex-polarized high-frequency microphone, 4 mV/Pa, 4 Hz-90kHz, 35dBA-165dB