

CRY311 Free field measurement microphone



The CRY311 microphone is a type I pre-polarized 1-inch free field measurement microphone that converts acoustic signals into electrical signals. Using titanium film and special materials, and special stability treatment, has the advantages of wide frequency range, good frequency characteristics, wide dynamic range, good dynamic characteristics, good temperature and long time stability, especially suitable for high frequency and high noise pressure level measurement.

The open-circuit sensitivity (250Hz) is 100mV(-20dB) \pm 2dB, and the frequency response is 4Hz-12kHz \pm 2dB.

Features

- ✧ Compliance with IEC 61094-4:1995 Measurement microphones—Part 4: Specifications for working standard microphone.
- ✧ Compliance with GBT 20441.4-2006 measuring microphones - Part 4: Working standard Microphones specification.

Technical parameters

Detailed Performance Parameters

CRY311 Measurement Microphone	
Sound field type	1 inch free field type
Sentivity mV/Pa (dBV/Pa)	100mV(-20dB) \pm 2dB re 1v/Pa
Frequency Response(dB)	4Hz -12kHz \pm 2dB
Polarization voltage	0V
Typical capacitance (pF)	66pF(250Hz)
Linear range (Benchmark 20uPa)	5-130dB (250Hz)
Upper dynamic range (Benchmark is 20uPa)	The change of sentivityis 0.2dB/10dB) \geq 130dB (250Hz Distortion <3%)

CRY SOUND

Equivalent noise (Benchmarkis 20uPa)	≤5dBA (250Hz)
Operating temperature range	-20℃ to 60℃
Temperature coefficient	0.015dB /K (-10℃ to 50℃)
Static Pressure coefficient	-0.01dB /kPa
Relative humidity range	10- 90% no condensation
Relative humidity coefficient	<0.1dB (10- 90% no condensation)
Long-term stability	<0.03dB/a (15℃ to 25℃ on 250Hz)
Short-term stability	<0.03dB (15℃ to 25℃ on 250Hz)
Pressure Equalization Vent	Rear
Equalizing pressure time constant	>0.05s
IEC 61094-4 name	WS1F

Mechanical dimensions

Height(including guard cover)	19mm
Diameter(including guard cover)	23.77mm
Height(excluding guard cover)	17mm
Diameter(excluding guard cover)	23.77mm
Diaphragm ring	22.5mm
Pre-amplifier fit thread	23.11mm-60UNS
Guard conver thread	23.11mm-60UNS

Typical frequency response curve of CRY311 free-field microphone

