

CRY312 Pressure field measurement microphone



The CRY312 microphone is a type I pre-polarized 1-inch pressure 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 50mV(-26dB) ± 2 dB, and the frequency response is 4Hz-16kHz ± 2 dB.

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

CRY312 Measurement Microphone	
Sound field type	1 inch pressure field type
Sensitivity mV/Pa (dBV/Pa)	50mV(-26dB) ± 2 dB re 1v/Pa
Frequency Response(dB)	4Hz - 8kHz ± 2 dB
Polarization voltage	0V
Typical capacitance (pF)	55pF(250Hz)
Linear range (Benchmark 20uPa)	10-146dB (250Hz)
Upper dynamic range (Benchmark is 20uPa)	The change of sensitivity is 0.2dB/10dB ≥ 146 dB (250Hz Distortion <3%)
Equivalent noise (Benchmark is 20uPa)	≤ 10 dB(A) (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	WS1P

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 cover thread	23.11mm-60UNS

Typical frequency response curve of CRY312 Pressure-field microphone

