

M-series

The M series is professional measurement microphone complying with the IEC 61094 and IEC 61672 sound level meter standards.

Measurement Microphones

What is a good measurement microphone in audio applications? The IEC 61094 standards, entitled “Measurement Microphones”, specify the requirements for a good measurement microphone. In addition to frequency response, sensitivity, omnidirectional polar pattern, and dynamic range, there are two additional requirements for a good measurement microphone:

- 1) Calibration: The microphone is capable of being calibrated by one of the following methods:
 - (a) Calibration methods specified in IEC 61094-2 or IEC 61094-3.
 - (b) Comparison with a calibrated laboratory standard microphone.
 - (c) Calibration using a sound calibrator as specified in IEC 60942.

The majority of measurement microphones on the market lack the calibration capability due to their structure or diameter limitations.

- 2) Environmental Sensitivity Stability: The standards specify microphone sensitivity change with temperature, humidity, and static pressure shall be within ± 0.03 dB/C, ± 0.001 dB/%, and ± 0.03 dB/kPa. Most of the measurement microphones on the market do not meet such specifications or are not tested for environmental conditions.

MicW has fourteen years experience in manufacturing measurement microphones for industry use. Our new M Series measurement microphones for audio applications reflect that experience.



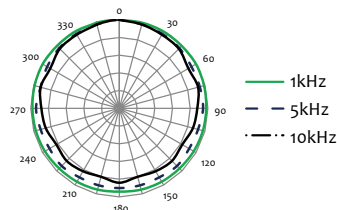
M416 Measurement Mic

The M416 is a calibrated measurement microphone with 1/4 inch capsule. It complies with the IEC 61672 Class 2 sound level meter standard. It is suitable for measuring sound pressure in simple sound fields, such as home recording studio's - high end hifi systems & room conditions.

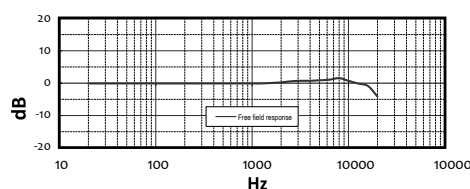
Specifications

Microphone M416	
Type	Pre-polarized Condenser
Capsule diameter	7mm
Polar pattern	Omnidirectional
Sensitivity(± 2 dB)	30mV/Pa;
Frequency response	20Hz-20kHz
Power supply	48V Phantom power
Max. SPL(<1% THD)	130 dB
Equ. noise level	<30 dBA
Output impedance	<600 Ohm
Maximum Sensitivity Change Under the conditions	
Temperature -10 to 50°C	+1.0 dB
Humidity up to 98%RH	
Pressure: 65 to 115 kPa	
Length	144mm
Weight	110g
Connector	3-pin XLR

Polar pattern



Frequency response



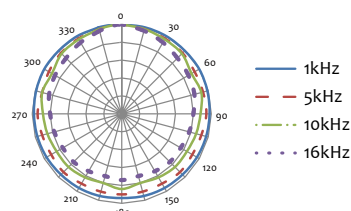
M215 Measurement Mic

The M215 is a calibrated measurement microphone with 1/2 inch capsule. It complies with the IEC 61094 and IEC 61672 Class 1 sound level meter standards widely used in professional audio environments, such as theater - recording studio - control room design & stage acoustics, to measure the technical references.

Specifications

Microphone M215	
Type	Pre-polarized Condenser
Capsule diameter	12.7mm
Polar pattern	Omnidirectional
Sensitivity(± 2 dB)	40mV/Pa;
Frequency response	20Hz-31.5kHz
Power supply	48V Phantom power
Max. SPL(<1% THD)	135 dB
Equ. noise level	<18 dBA
Output impedance	<75 Ohm
Temperature Coefficient(dB/°C)	0.009
Humidity Coefficient (dB/%RH)	0.001
Pressure Coefficient(dB/kPa)	0.008
Length	155mm
Weight	120g
Connector	3-pin XLR

Polar pattern



Frequency response

