

M2010 / M2015 Measurement Microphones



M2010 / M2015

The M2010 and M2015 are compact and accurate measurement microphones for acoustics, R&D and production. They are particularly suited for applications with restricted space available.

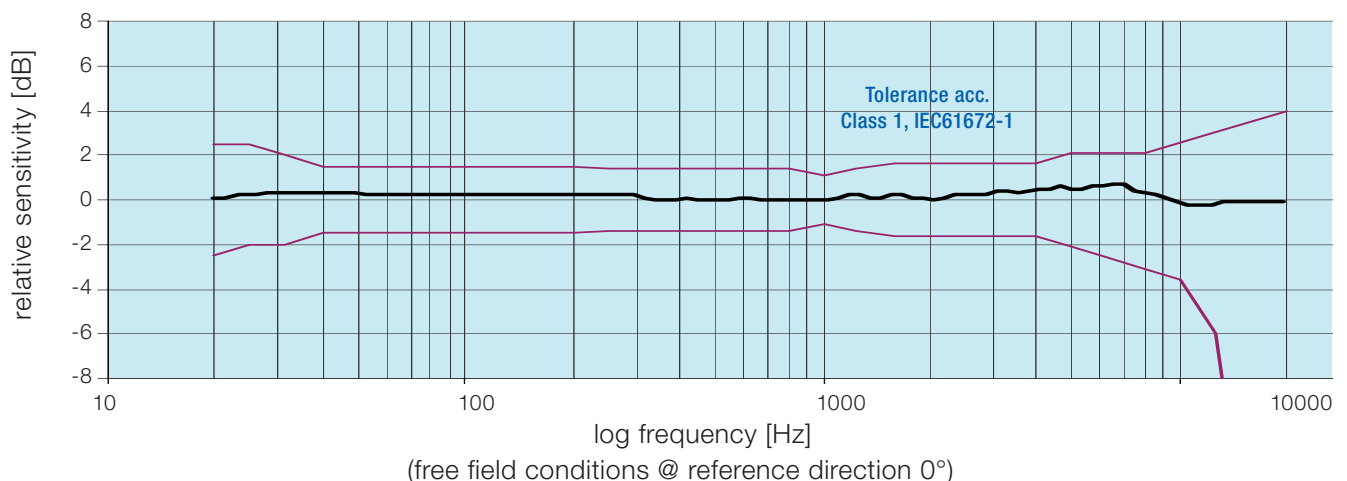
Main characteristics:

- 1/2" omni-directional free-field microphone
- Frequency Response Flatness Class 1 (IEC 61672-1)
- Phantom power 10 - 48 VDC
- Measurement range
M2010: 24 - 145 dB SPL (typical)
M2015: 34 - 155 dB SPL (typical)

The microphones M2010 and M2015 are optimised for a flat, free-field response in the audio range 20 Hz - 20 kHz.

The detachable microphone cable at the pre-amplifier simplifies integration into mechanical fixtures, such as robotic arms. The microphone includes a wind screen, a microphone stand and a calibration certificate with individual frequency response chart and sensitivity.

TYPICAL FREQUENCY RESPONSE

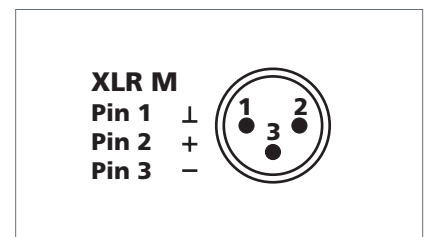


TECHNICAL SPECIFICATIONS

	M2010	M2015
Microphone type	Omnidirectional, pre-polarized condenser, free field microphone	
Capsule / Transducer	1/2" detachable with 60UNS2 thread and metal diaphragm	
Flatness	exceeds Class 1 (IEC61672-1) < ±1 dB @ 100 Hz - 4 kHz < ±2 dB @ 10 Hz - 20 kHz	
Sensitivity	-29 dBV/Pa ±3 dB (35 mV/Pa @ 1 kHz)	-40 dBV/Pa ±3 dB (10 mV/Pa @ 1 kHz)
Maximum SPL @ 1 kHz, THD 3%, 48 VDC	typical 145 dB SPL	typical 155 dB SPL
Equivalent noise level	< 24 dB SPL (A-weighted)	< 34 dB SPL (A-weighted)
Temperature coefficient	< ±0.015 dB / °C	
Temperature range	-10°C to +50°C (14°F to 122°F)	
Long term stability	> 250 years/dB	
Electrostatic capacitance	18 pF (cartridge only)	
Output impedance	100 Ohm (balanced), 50 Ohm (single ended)	
Power consumption @ dB SPL max	typical 4 mA	
Overall shell length	50 mm (1.9")	
Body diameter	13.2 mm (0.52") with protective cap	
Connector	3-pole XLR (NEUTRIK®)	
Cable	1.5 m (5 ft), diameter 3.6 mm, cable is detachable at the amplifier side, 3-pole NanoCon® (NEUTRIK®)	
Accessories (included)	Microphone clamp Wind shield, 35 mm (1.4") diameter Individual calibration certificate	

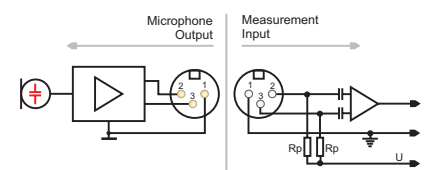


Wind screen

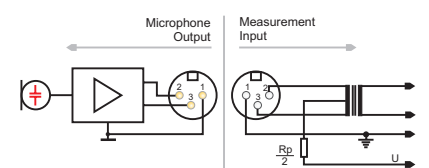


Connection diagram of microphone

PHANTOM POWER SUPPLY



AC coupled amplifiers



Input transformer with center tap (floating).

Worst case maximum SPL (@ THD 3 %, 1 kHz, Rp*)			
Phantom Power	48 VDC	> 142 dB SPL	> 152 dB SPL
	24 VDC	> 134 dB SPL	> 144 dB SPL
	15 VDC	> 128 dB SPL	> 138 dB SPL
	10 VDC	> 124 dB SPL	> 134 dB SPL

*Rp = 6.8 kOhm @ U = 48 V, 1.2 kOhm @ 24 V, 680 Ohm Ω @ 15,10 V

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