

# Measurement Microphone M2010

The M2010 is a very compact and accurate measurement microphone providing high accuracy for:

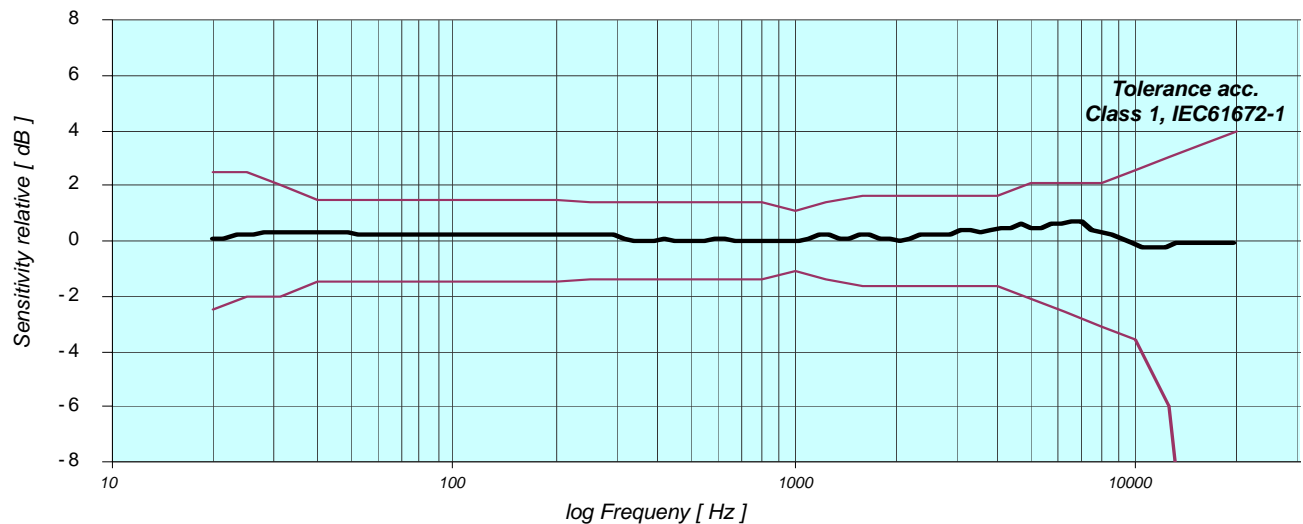
- Acoustic Measurements, R&D
- Telecom Industry Tests
- Production Line Testing

## Main characteristics:

- 1/2" omni-directional pressure mic
- Flatness Class 1 (IEC 61672-1)
- Measurement Range 24 - 150 dB SPL
- Phantom Power 10 - 48 VDC
- Balanced Output



Frequency Response (typical), free field conditions @ reference direction 0°:



# Measurement Microphone M2010



- the protection-case includes
- 1x microphone cartridge
  - 1x pre-amplifier
  - 1x detachable 5ft. cable
  - 1x wind-protection
  - 1x calibration-certificate with
    - frequency-response
    - sensitivity-value
  - 1x mic-stand
  - 1x individual serial number



detachable 3 pole NanoCon connector

The detachable microphone cable between the cartridge and the pre-amplifier simplifies adaptations into mechanical fixtures (such as robotic arms), to the user's convenience.

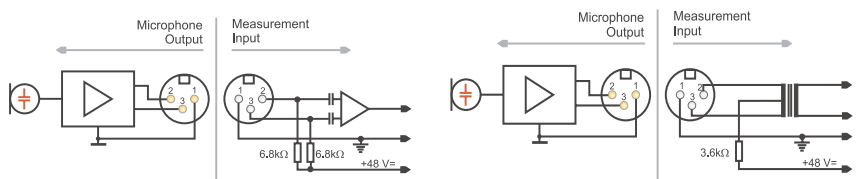
## Specifications:

<i>Microphone type</i>	pre-polarized condenser, free field transducer
<i>Nominal diameter</i>	1/2"
<i>Polar pattern</i>	omni-directional
<i>Sensitivity</i>	-29 dBV/Pa ±3 dB (35 mV/Pa @ 1kHz)
<i>Flatness</i>	better Class 1 (IEC61672-1) < ±1 dB @ 100 Hz - 4 kHz < ±2 dB @ 10 Hz - 20 kHz
<i>Measurement range</i>	24-150 dB <sub>SPL</sub> @ 48 VDC phantom power
<i>Equivalent Noise level</i>	< 24 dB <sub>SPL</sub> (A-weighted)
<i>Temperature coefficient</i>	0.01 dB / °C
<i>Long term stability</i>	>250 years /dB
<i>Electrostatic capacitance</i>	18 pF (cartridge only)
<i>Output impedance</i>	100 Ohm (balanced) 50 Ohm (single ended)

<i>Power supply, phantom power</i>	48VDC	24VDC	15VDC	10VDC
<i>Distortion limit (3%) @ 1 kHz</i>	150dB <sub>SPL</sub>	143dB <sub>SPL</sub>	138dB <sub>SPL</sub>	131dB <sub>SPL</sub>
<i>Power consumption @ dB<sub>SPL</sub> max</i>	<3.8mA	<3.8mA	<2.9mA	<2.0mA

<i>Overall shell length</i>	50 mm (1.9")
<i>Diameter</i>	13.2 mm (0.52") with protective cap
<i>Connectors</i>	3 pole XLR (NEUTRIK®)
<i>Cable</i>	1.5 m (5 ft), diameter 3.6 mm cable is detachable at the amplifier side, 3 pole NanoCon® (NEUTRIK®)

## Wiring Diagram, Phantom Power = 48 VDC



Phantom power insertion with AC coupled amplifiers.

Phantom power insertion by input transformer with center tapping (floating).



Less noise • More sound  
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