

AUDIO PRECISION MEASUREMENT MICROPHONES

for Acoustic and Electro-Acoustic Test



HIGHLIGHTS

- Free-field response
- Pre-polarized microphone cartridge
- ICP® / CCP powered
- TEDS compliant

STANDARDS COMPLIANCE

Models 378M31, 378M32 and 378M33 comply with the following standards:

- IEC 61094-4 type WS2F or WS3F compliant
- IEC 61672 class 1 compliant for premium sound level meter use
- IEC 60651 type 1 compliant
- Calibration reference microphone traceable through PTB, compliant with ISO 9001 & 17025, A2LA approved

Audio Precision offers a selection of measurement microphones designed to provide ready solutions for our customers working in acoustic test.

The AP microphone family includes one ¼" and two ½" precision measurement microphone systems, as well as a ¼" array microphone and an occluded ear simulator. All units are pre-polarized, TEDS-compliant and ICP®/CCP powered. The three precision microphones are calibrated and delivered with a certificate of calibration, ensuring the utmost of confidence in measurement results when paired with calibrated instruments such as the APx515 Audio Analyzer and APx1701 Transducer Test Interface.

Additionally, a phantom-powered preamplifier that can be configured to mate with any standard ½" or ¼" IEC 60194 mic cartridge is available. You can order it as a stand-alone preamp, or as a calibrated system that includes a high-resolution microphone cartridge. See the Audio Precision 376M03 Data Sheet for detailed information.

AUDIO PRECISION MEASUREMENT MICROPHONES

MODEL 378M31

1/2"



The Audio Precision model 378M31 is a general purpose measurement microphone recommended for high accuracy applications where high sensitivity is required for free-field response measurements.

Frequency response: 3.75 Hz to 20 kHz, ± 2 dB
 Sensitivity: 50 mV/Pa
 Inherent Noise: 15.5 dBA re 20 μ Pa
 Dynamic Range: 137 dB re 20 μ Pa

MODEL 378M32

1/2"



The Audio Precision model 378M32 has a flat response in applications where high frequencies (up to 40 kHz) need to be measured very accurately. As an alternative to a standard high sensitivity (50 mV/Pa) microphone, it has an enhanced upper dynamic range and doesn't overload or saturate for measurements above 136 dB.

Frequency response: 3.15 Hz to 31.5 kHz, ± 2 dB
 Sensitivity: 12.6 mV/Pa
 Inherent Noise: 22 dBA re 20 μ Pa
 Dynamic Range: 150 dB re 20 μ Pa

MODEL 378M33

1/4"



The Audio Precision model 378M33 is recommended for extreme accuracy applications where high frequency measurements or high acoustic amplitude measurements are required.

Frequency response: 5 Hz to 80 kHz, ± 2 dB
 Sensitivity: 2.0 mV/Pa
 Inherent Noise: 42 dBA re 20 μ Pa
 Dynamic Range: 165 dB re 20 μ Pa

MODEL 130M23

1/4"



The value-priced 130M23 array microphone is an excellent choice for large channel count applications, being a cost-effective alternative to higher-end, class-one test and measurement microphones.

Frequency response: 20 Hz to 20 kHz, ± 2 dB
 Sensitivity: 14 mV/Pa
 Inherent Noise: <30 dBA re 20 μ Pa
 Dynamic Range: 143 dB re 20 μ Pa

MODEL AECM304 (with 426M14)



The Audio Precision model AECM304 Occluded-Ear Simulator is used for the measurement of earphones coupled to the ear by ear inserts.

The AECM304 includes an internal 1/2" 12.5 mV/Pa microphone, and requires a compatible preamplifier, such as the Audio Precision model 426M14 (as shown).

The AECM304 satisfies the description of an IEC711 Ear Simulator, and is compliant with IEC60318-4:2010.

MODEL 376M03 Phantom-Powered



We also offer phantom-powered preamplifier/mic combinations that can be configured in the field for a wide range of either 1/2" or 1/4" mic cartridges. See the Audio Precision 376M03 Data Sheet for more information.

These phantom-powered microphone systems are not compatible with ICP®/CCP powering, and do not support TEDS.

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