



# Prepolarized ICP® Array Microphones

For Consumer Goods and R&D Laboratory Testing

## Highlights

- Low per channel cost
- Powered by ICP® sensor signal conditioners
- Integrated preamplifier
- TEDS Standard

## Applications

- Holography
- Sound Pressure Mapping
- Beamforming
- Multichannel Measurements
- Spatial Transformation of Sounds
- Noise Source Identification
- Non-contact Defect Detection
- General Audible Range Testing



Prepolarized ICP® Array microphones are a cost-effective alternative to the 377 series and are suitable for measuring sound within the normal range of the human hearing capability. PCBs 130 series of array microphones are single piece units that include a built-in preamplifier. The array microphones have excellent phase specifications. Using multiple microphones and spacing them in a predetermined pattern coordinated with the proper software, special transformation of a complex sound field is projected to effectively map the acoustic energy flow. End users can now pin point the noise source, and determine the speed and direction of sound. With the value that the array microphones offer this makes them an excellent choice for noise identification, near field acoustic holography, sound pressure mapping, beamforming and other large channel count applications.

Transducer Electronic Data Sheets (TEDS) enhance the identification of each microphone. All PCB® array microphones come standard with TEDS functionality and are compliant with the IEEE 1451.4 standard.

### Calibration & Warranty

PCB® adheres to a systematic quality control procedure using the finest materials, assembled in a clean environment. Our microphones are hand-crafted at our 300,000 sf sales and manufacturing campus, and machined at our adjacent "State of the Art" 52,000 sf CNC machine shop - giving us greater control over quality and delivery. Each unit is quality inspected with a traceable calibration certification. Our "Best in Class" 5-year no limitation warranty is unmatched by the industry, and our microphones are backed by **Total Customer Satisfaction** no risk policy.

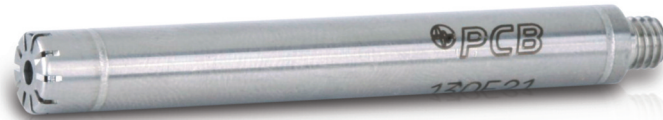




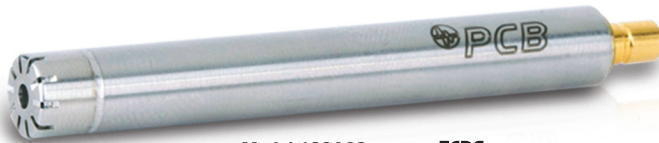
Model 130E22 (SMB Connector)



Model 130E20 (BNC Connector)



Model 130E21 (10-32 Connector)



Model 130A23 (SMB Connector)



Model 130A40 Low Profile Surface Microphone Pad

ICP® Array Microphones with Integral Preamp

Model Number	130A23	130E20	130E21	130E22	130B40
Microphone Diameter	1/4 in	1/4 in [4]	1/4 in	1/4 in	1/4 in
Response	Free-Field	Free-Field	Free-Field	Free-Field	Pressure
Sensitivity (± 3 dB at 250 Hz)	14 mV/Pa	45 mV/Pa	45 mV/Pa	45 mV/Pa	8.5 mV/Pa
Frequency Response (± 2 dB)	20 to 20k Hz [1]	20 to 20k Hz [1]	20 to 20k Hz [1]	20 to 20k Hz [1]	20 to 10k Hz [2]
Dynamic Range	30 dBA to 143 dB [3]	30 dBA to 122 dB	30 dBA to 122 dB	30 dBA to 122 dB	32 dBA to 142 dB [3]
Polarization Voltage	0 V	0 V	0 V	0 V	0 V
Temperature Range	-14 to +122 °F -10 to +50 °C	+14 to +122 °F -10 to +50 °C	+14 to +122 °F -10 to +50 °C	+14 to +122 °F -10 to +50 °C	-40 to +176 °F -40 to +80 °C
Connector	SMB Socket	BNC Jack	10-32 Jack	SMB Socket	10-32 Jack

Notes

[1] ± 5 dB. [2] ± 3 dB, 20 to 20k Hz ± 6 dB. [3] 150 dB Max Without Clipping. [4] 1/2" Preamp Dia.



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AS9100 CERTIFIED ■ ISO 9001 CERTIFIED ■ A2LA ACCREDITED to ISO 17025

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PCB Piezotronics Test & Measurement Acoustic products consists of microphones, preamplifiers, and accessories for noise testing, pressure mapping, holography, NVH, beamforming, arrays and general sound measurements. Additional Test & Measurement products include pressure, force, load, strain, torque, acceleration, shock, vibration, and electronics. PCB® products are used for product design and development, consumer product testing, quality assurance, civil structure monitoring, research and development, education and engineering applications. All products are backed by our Total Customer Satisfaction policy, which guarantees your satisfaction or your money refunded.

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