



# Prepolarized ICP® Array Microphones

## Highlights

- Low per channel cost
- Powered by ICP® sensor signal conditioners
- Integrated preamplifier
- TEDS Standard
- Rugged water and dust resistant model available

## Applications

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



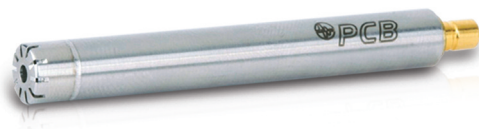
Prepolarized ICP® Array microphones are a cost-effective alternative to the precision microphones and are suitable for measuring sound within the normal range of the human hearing capability. PCB's 130 series of array microphones are single piece units that include a built-in preamplifier and have excellent 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. Array microphones are 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 which is very helpful in large channel count applications. 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 room 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.





CE **Model 130A23**  
(SMB Connector)



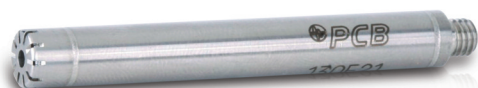
CE **Model 130A24**  
(BNC Connector)



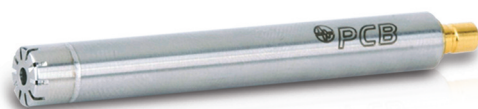
CE **Model 130E20**  
(BNC Connector)



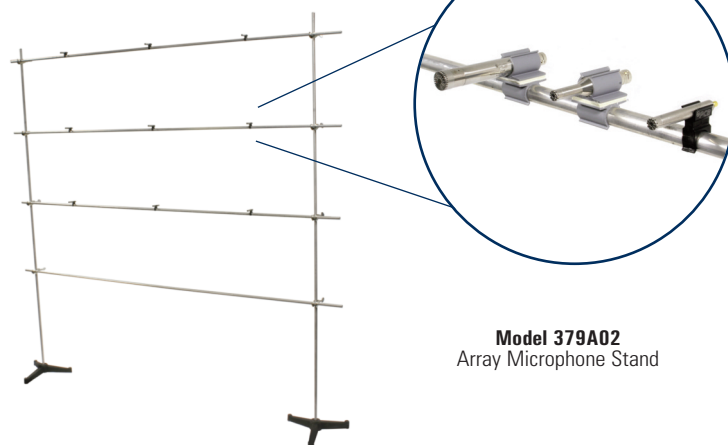
CE **Model 130B40**  
Low Profile  
Surface Microphone Pad



CE **Model 130E21**  
(10-32 Connector)



CE **Model 130E22**  
(SMB Connector)



**Model 379A02**  
Array Microphone Stand

### ICP® Array Microphones with Integral Preamplifier

Model Number	(New) 130A24	130A23	130E20	130E21	130E22	130B40
Microphone Diameter	1/2 in	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	Free-field	Pressure
Sensitivity ( $\pm 3$ dB at 250 Hz)	14 mV/Pa	14 mV/Pa	45 mV/Pa	45 mV/Pa	45 mV/Pa	8.5 mV/Pa
Frequency response ( $\pm 2$ dB)	20 Hz to 16k Hz [5]	20 Hz to 20k Hz	20 Hz to 20k Hz [1]	20 Hz to 20k Hz [1]	20 Hz to 20k Hz [1]	20 Hz to 10k Hz [2]
Dynamic Range	30 dBA to 143 dB [3]	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]
Polarized Voltage	0 V	0 V	0 V	0 V	0 V	0 V
Temperature Range	-14 to +122 °F	-14 to +122 °F	+14 to +122 °F	+14 to +122 °F	+14 to +122 °F	-40 to +176 °F
	-10 to +50 °C	-10 to +50 °C	-10 to +50 °C	-10 to +50 °C	-10 to +50 °C	-40 to +80 °C
Connector	BNC Jack	SMB Socket	BNC Jack	10-32 Jack	SMB Socket	10-32 Jack
Application	Rugged water and dust resistant	High frequency and high amplitudes	General purpose	General purpose	Quick release connectivity	Low Profile and surface mount for windy applications

#### Notes

[1]  $\pm 5$  dB. [2]  $\pm 3$  dB, 20 to 20k Hz  $\pm 6$  dB. [3] 150 dB Max without clipping. [4] 1/2" Preamplifier Dia. [5]  $\pm 3$  dB



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