

# Audio Precision 130M23 Array Microphone

## Complete Specifications

	ENGLISH	SI	Notes
<b>Performance</b>			
Nominal Microphone Diameter	1/4"	1/4"	
Frequency Response Characteristic (at 0° incidence)	Free-Field	Free-Field	
Frequency Response ( $\pm 2$ dB)	20 to 20,000 Hz	20 to 20,000 Hz	
Phase Match (50 Hz to 100 Hz)	$\pm 5^\circ$	$\pm 5^\circ$	
Phase Match (100 Hz to 3 kHz)	$\pm 3^\circ$	$\pm 3^\circ$	
Phase Match (3 kHz to 5 kHz)	$\pm 5^\circ$	$\pm 5^\circ$	
Phase Match (5 kHz to 10 kHz)	$\pm 10^\circ$	$\pm 10^\circ$	
Sensitivity (@ 250 Hz)	14 mV/Pa	14 mV/Pa	
Sensitivity ( $\pm 3$ dB) (@ 250 Hz)	-37.1 dB re 1 V/Pa	-37.1 dB re 1 V/Pa	
Inherent Noise (A Weighted)	<30 dB(A) re 20 $\mu$ Pa	<30 dB(A) re 20 $\mu$ Pa	
Dynamic Range (High)	150 dB	150 dB	[2][1]
Dynamic Range (3% Distortion Limit)	>143 dB	>143 dB	
TEDS Compliant	Yes	Yes	[3]
<b>Environmental</b>			
Temperature Range (Operating)	+14 to +122 °F	-10 to +50 °C	
Temperature Effect on Output (-10 to +50 °C)	<0.7 dB	<0.7 dB	[1]
Influence of Axial Vibration (1 m/s <sup>2</sup> )	60 dB re 20 $\mu$ Pa	60 dB re 20 $\mu$ Pa	[1]
<b>Electrical</b>			
Excitation Voltage	18 to 30 VDC	18 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Bias Voltage	9 to 14 VDC	9 to 14 VDC	
Maximum Output Voltage	$\pm 8$ Vpk	$\pm 8$ Vpk	
Output Impedance	<52 Ohm	<52 Ohm	
<b>Physical</b>			
Housing Material	Stainless Steel	Stainless Steel	
Electrical Connector (Output)	SMB coaxial socket	SMB coaxial socket	
Size (Diameter x Length) (overall)	0.28 in x 2.33 in	7.0 mm x 59.1 mm	
Weight	.26 oz.	7.4 gm	[1]
<b>Notes</b>			
[1] Typical.			
[2] Max without clipping.			
[3] TEDS Capable Digital Memory and Communication, compliant with IEEE 1451.4			

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