Model	Number
48	5B36

USB, DUAL-CHANNEL, ICP® SENSOR SIGNAL CONDITIONER

Revision: B ECN #: 43617

Performance	<u>ENGLISH</u>	<u>SI</u> 2	
Channels	2		
Input Range	± 5 V	± 5 V	
Frequency Range(± 2 %)	2 to 50,000 Hz	2 to 50,000 Hz	[2]
Frequency Range(± 5 %)	1 to 50,000 Hz	1 to 50,000 Hz	[2]
Non-Linearity	± 1 %	± 1 %	
Voltage Gain(± 0.5 %)	1:1	1:1	
Phase Response(± 5 °)	5 to 50,000 Hz	5 to 50,000 Hz	[2]
Phase Response(± 10 °)	1 to 50,000 Hz	1 to 50,000 Hz	[2]
Environmental			
Temperature Range(Operating)	+32 to +122 °F	0 to +50 °C	
Electrical			
Excitation Voltage(To Sensor)	18.5 to 20.5 VDC	18.5 to 20.5 VDC	
Constant Current Excitation(To Sensor)	3.8 to 5.8 mA	3.8 to 5.8 mA	
DC Offset	<80 mV	<80 mV	
Spectral Noise(1 Hz)	150 nV/√Hz	150 nV/√Hz	[1]
Spectral Noise(10 Hz)	50 nV/√Hz	50 nV/√Hz	[1]
Spectral Noise(100 Hz)	35 nV/√Hz	35 nV/√Hz	[1]
Spectral Noise(1000 Hz)	270 nV/√Hz	270 nV/√Hz	[1]
Spectral Noise(10,000 Hz)	210 nV/√Hz	210 nV/√Hz	[1]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1)	<u>6</u> μV/rms	<u>6</u> μV/rms	[1]
Power Required	DC power	DC power	
Total Harmonic Distortion(at 100 Hz with full-scale input)		0.75 %	[1]
DC Power	5 VDC	5 VDC	
Crosstalk	<-92 dB	<-92 dB	
Current Consumption	69 mA	69 mA	[1]
Output Impedance(Parallel)	1.1 MOhm	1.1 MOhm	[1]
Output Impedance(Series)	2.2 μF	2.2 µF	[1]
Physical			
Electrical Connector(Input, sensor)	BNC Jack	BNC Jack	
Electrical Connector(Output, scope)	3.5 mm Stereo Jack	3.5 mm Stereo Jack	
Electrical Connector(External Power, DC)	Integral Cable with USB	Integral Cable with USB	
	Plug Termination	Plug Termination	
Size (Depth x Height x Width)	1.33 in x 1.18 in x 3.67 in	3.4 cm x 3.0 cm x 9.3 cm	
Weight	2.5 oz	70 gm	[1]
All specifications are at room temperature unless otherwi-	se specified.		

In the interest of constant product improvement, we reserve the right to change specifications without notice.

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OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

[1]Typical.

[2]Un-buffered output, read out device input impedance affects discharge time constant and low frequency response of unit.

SUPPLIED ACCESSORIES:

Model 009M130 Output cable 3.5mm stereo jack to 3.5mm stereo jack, 1ft long. (1) Model 009M131 Cable output 3.5mm stereo jack to 2 phono plugs/BNC adaptors, 3ft long. (1)

Entered: AP	Engineer: CPH	Sales: ML	Approved: JWH	Spec Number:
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