

Performance	ENGLISH	SI	
Channels	8	8	
Sensor Input Type(s)	ICP®, Voltage, Bridge/Differential	ICP®, Voltage, Bridge/Differential	
Voltage Gain(ICP/Voltage Mode)	x0.1 to x200	x0.1 to x200	
Voltage Gain(Bridge/Differential Mode)	x0.1 to x2000	x0.1 to x2000	
Accuracy(Gain, x0.1 to x0.4)	± 5 %	± 5 %	
Accuracy(Gain, x0.5 to x0.99)	± 1 %	± 1 %	
Accuracy(Gain, x1.0 to x2000)	± 0.5 %	± 0.5 %	
Accuracy(Excitation)	± 1 %	± 1 %	
Input Range(Differential)	± 0 to 10 V	± 0 to 10 V	
Output Range(Minimum)	± 10 V	± 10 V	
Frequency Range(-5 %)(x100 Gain)	0.05 to 100,000 Hz	0.05 to 100,000 Hz	[5]
Frequency Range(-5 %)(≥100 Gain)	0.05 to 50,000 Hz	0.05 to 50,000 Hz	[5]
Phase Response(at 1 kHz)	± 1 °	± 1 °	
Cross Talk(maximum @ 10kHz)	-72 dB	-72 dB	
Calibration(Shunt)	Internal/External	Internal/External	
TEDS Sensor Support	Yes	Yes	
Fault/Bias Monitor/Meter(LED)	Open/Short/Overload	Open/Short/Overload	
Control Interface			
Digital Control Interface	Ethernet	Ethernet	
Environmental			
Temperature Range(Operating)	+32 to +120 °F	0 to +50 °C	
Electrical			
Power Required(direct input to unit)	AC Power	AC Power	
AC Power(47 to 63 Hz)	100 to 240 VAC	100 to 240 VAC	
AC Power	≤ 0.9 Amps	≤ 0.9 Amps	
Excitation Voltage(To Sensor)	>+24 VDC	>+24 VDC	
Excitation Voltage(Bridge Input)(Positive)	+0 to 12 V	+0 to 12 V	[1]
Excitation Voltage(Bridge Input)(Negative)	-0 to 12 V	-0 to 12 V	[1][2]
Input Imbalance Adjustment(Maximum, Gain <10)	± 2 V	± 2 V	
Input Imbalance Adjustment(Maximum, Gain ≥10)	± 0.2 V	± 0.2 V	
Common Mode Voltage(Maximum)	± 10 V	± 10 V	
DC Offset(Stability, Maximum RTI)	5 µV/°C	5 µV/°C	
DC Offset(AC Coupled)	≤ 50 mV	≤ 50 mV	
DC Offset(DC Coupled, Gain <100)	<10 mV	<10 mV	
DC Offset(DC Coupled, Gain ≥100)	<20 mV	<20 mV	
Current Output(Bridge Input)(Excitation, Maximum)	30 mA	30 mA	
Constant Current Excitation(To Sensor)	0 to 20 mA	0 to 20 mA	
Output Impedance	≤ 50 Ohm	≤ 50 Ohm	
Impedance(Input)	>1 MOhm	>1 MOhm	
Overload Threshold(± 0.2 Vpk)	± 10 Vpk	± 10 Vpk	
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1)	50 µV rms	50 µV rms	[3]
Spectral Noise(1 Hz)(Gain x1)	6.0 µV/√Hz	6.0 µV/√Hz	[3]
Spectral Noise(10 Hz)(Gain x1)	1.5 µV/√Hz	1.5 µV/√Hz	[3]
Spectral Noise(100 Hz)(Gain x1)	1.0 µV/√Hz	1.0 µV/√Hz	[3]
Spectral Noise(1 kHz)(Gain x1)	1.0 µV/√Hz	1.0 µV/√Hz	[3]
Spectral Noise(10 kHz)(Gain x1)	1.0 µV/√Hz	1.0 µV/√Hz	[3]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x10)	75 µV rms	75 µV rms	[3]
Spectral Noise(1 Hz)(Gain x10)	20 µV/√Hz	20 µV/√Hz	[3]
Spectral Noise(10 Hz)(Gain x10)	1.5 µV/√Hz	1.5 µV/√Hz	[3]
Spectral Noise(100 Hz)(Gain x10)	1.0 µV/√Hz	1.0 µV/√Hz	[3]
Spectral Noise(1 kHz)(Gain x10)	1.0 µV/√Hz	1.0 µV/√Hz	[3]
Spectral Noise(10 kHz)(Gain x10)	1.0 µV/√Hz	1.0 µV/√Hz	[3]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x100)	350 µV rms	350 µV rms	[3]
Spectral Noise(1 Hz)(Gain x100)	140.0 µV/√Hz	140.0 µV/√Hz	[3]
Spectral Noise(10 Hz)(Gain x100)	14.0 µV/√Hz	14.0 µV/√Hz	[3]
Spectral Noise(100 Hz)(Gain x100)	8.0 µV/√Hz	8.0 µV/√Hz	[3]
Spectral Noise(1 kHz)(Gain x100)	4.0 µV/√Hz	4.0 µV/√Hz	[3]
Spectral Noise(10 kHz)(Gain x100)	4.0 µV/√Hz	4.0 µV/√Hz	[3]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1000)	3000 µV/rms	3000 µV/rms	[4]
Physical			
Electrical Connector(ICP® Sensor Input)	BNC Jack	BNC Jack	
Electrical Connector(Bridge/Differential)	8-socket mini DIN	8-socket mini DIN	
Electrical Connector(Output)	BNC Jack	BNC Jack	
Electrical Connector(Ethernet)	RJ-45	RJ-45	
Size (Height x Width x Depth)(nominal)	1.75 in x 19.0 in x 13.7 in	44.5 mm x 482.6 mm x 348 mm	
Weight	7.0 lb	3.18 kg	

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]Adjustable in 0.1V steps.
 [2]Negative excitation can be set to 0V or to track the positive excitation voltage.
 [3]Typical, AC Coupled.
 [4]Bridge/Differential Mode, DC Coupled with 350 ohm bridge
 [5]AC coupled mode (low frequency response is 0Hz in DC Coupled mode.)
 [6]See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 017AXX Power Cord (1)
 Model EE75 PCB MCSC Control Software. (1)

Entered: LK	Engineer: CPH	Sales: ML	Approved: ECB	Spec Number:
Date: 1/20/2016	Date: 1/20/2016	Date: 1/20/2016	Date: 1/20/2016	43990



[6] All specifications are at room temperature unless otherwise specified.
 In the interest of constant product improvement, we reserve the right to change specifications without notice.
 ICP® is a registered trademark of PCB Group, Inc.



Phone: 716-684-0001
 Fax: 716-684-0987
 E-Mail: info@pcb.com

3425 Walden Avenue, Depew, NY 14043