

<b>Performance</b>	<b>ENGLISH</b>	<b>SI</b>	
Channels	4	4	
Sensor Input Type(s)	ICP®, Voltage, Bridge/Differential	ICP®, Voltage, Bridge/Differential	
Voltage Gain(ICP/Voltage Mode)	0.1 to 200	0.1 to 200	
Voltage Gain(Bridge/Differential Mode)	0.1 to 2000	0.1 to 2000	
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 %)( $<100$ Hz)	0.05 to 100,000 Hz	0.05 to 100,000 Hz	[5]
Frequency Range(-5 %)( $\geq 100$ Hz)	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	
<b>Control Interface</b>			
Human Interface	Keypad	Keypad	
Display	2 rows, 16 columns	2 rows, 16 columns	
Digital Control Interface	RS-232	RS-232	
Digital Control: Data Rate	19,200 bps	19,200 bps	
Digital Control: Start, Data, Stop, Parity	1, 8, 1, No	1, 8, 1, No	
Digital Control: Handshaking	RTS/CTS	RTS/CTS	
Digital Control: Cable Length(Maximum)	50 ft	50 ft	
Digital Control Interface	Ethernet	Ethernet	
<b>Environmental</b>			
Temperature Range(Operating)	+32 to +120 °F	0 to +50 °C	
<b>Electrical</b>			
Power Required(for supplied AC power adaptor)	AC Power	AC Power	
AC Power(50 to 60 Hz)	100 to 240 VAC	100 to 240 VAC	
AC Power	1.6 amps	1.6 amps	
Excitation Voltage(To Sensor)	>+24 VDC	>+24 VDC	
Excitation Voltage(Positive)	+0 to 12 V	+0 to 12 V	[1]
Excitation Voltage(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 $\geq 10$ )	± 0.2 V	± 0.2 V	
Common Mode Voltage(Maximum)	± 10 V	± 10 V	
DC Offset(Stability, Maximum RTI)	5 $\mu$ V/°C	5 $\mu$ V/°C	
DC Offset(AC Coupled)	≤ 50 mV	≤ 50 mV	
DC Offset(DC Coupled, Gain $<100$ )	<10 mV	<10 mV	
DC Offset(DC Coupled, Gain $\geq 100$ )	<20 mV	<20 mV	
DC Power	+9 to 18 VDC	+9 to 18 VDC	
DC Power	≤ 2.5 amps	≤ 2.5 amps	
Current Output(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 $\mu$ V rms	50 $\mu$ V rms	[3]
Spectral Noise(1 Hz)(Gain x1)	6.0 $\mu$ V/√Hz	6.0 $\mu$ V/√Hz	[3]
Spectral Noise(10 Hz)(Gain x1)	1.5 $\mu$ V/√Hz	1.5 $\mu$ V/√Hz	[3]
Spectral Noise(100 Hz)(Gain x1)	1.0 $\mu$ V/√Hz	1.0 $\mu$ V/√Hz	[3]
Spectral Noise(1 kHz)(Gain x1)	1.0 $\mu$ V/√Hz	1.0 $\mu$ V/√Hz	[3]
Spectral Noise(10 kHz)(Gain x1)	1.0 $\mu$ V/√Hz	1.0 $\mu$ V/√Hz	[3]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x10)	75 $\mu$ V rms	75 $\mu$ V rms	[3]
Spectral Noise(1 Hz)(Gain x10)	20 $\mu$ V/√Hz	20 $\mu$ V/√Hz	[3]
Spectral Noise(10 Hz)(Gain x10)	1.5 $\mu$ V/√Hz	1.5 $\mu$ V/√Hz	[3]
Spectral Noise(100 Hz)(Gain x10)	1.0 $\mu$ V/√Hz	1.0 $\mu$ V/√Hz	[3]
Spectral Noise(1 kHz)(Gain x10)	1.0 $\mu$ V/√Hz	1.0 $\mu$ V/√Hz	[3]
Spectral Noise(10 kHz)(Gain x10)	1.0 $\mu$ V/√Hz	1.0 $\mu$ V/√Hz	[3]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x100)	350 $\mu$ V rms	350 $\mu$ V rms	[3]
Spectral Noise(1 Hz)(Gain x100)	140.0 $\mu$ V/√Hz	140.0 $\mu$ V/√Hz	[3]
Spectral Noise(10 Hz)(Gain x100)	14.0 $\mu$ V/√Hz	14.0 $\mu$ V/√Hz	[3]
Spectral Noise(100 Hz)(Gain x100)	8.0 $\mu$ V/√Hz	8.0 $\mu$ V/√Hz	[3]
Spectral Noise(1 kHz)(Gain x100)	4.0 $\mu$ V/√Hz	4.0 $\mu$ V/√Hz	[3]
Spectral Noise(10 kHz)(Gain x100)	4.0 $\mu$ V/√Hz	4.0 $\mu$ V/√Hz	[3]
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1000)	3000 $\mu$ V/rms	3000 $\mu$ V/rms	[4]
<b>Physical</b>			
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(DC Power Input)	6-socket mini DIN	6-socket mini DIN	
Electrical Connector(RS-232 Digital Control)	DB-9 Connector	DB-9 Connector	
Electrical Connector(Ethernet)	RJ45	RJ45	
Size (Height x Width x Depth)	3.20 in x 8.00 in x 5.90 in	8.10 cm x 20.0 cm x 15 cm	
Weight	2.50 lb	1134 gm	

**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 100-7103-50 (02711) Multi-conductor cable, 6-ft, 9-pin female to 9-pin male. (1)  
 Model 488B14/NC POWER CONVERTOR (1)  
 Model EE75 PCB MCSC Control Software. (1)

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

3425 Walden Avenue, Depew, NY 14043