

Performance	ENGLISH	SI
Channels	8	8
Sensor Input Type(s)	ICP®, Voltage, Charge	ICP®, Voltage, Charge
Voltage Gain Increment	0.1	0.1
Accuracy(Gain, x0.1 to x0.4)	± 5 %	± 5 %
Accuracy(Gain, x0.5 to x200)	± 1 %	± 1 %
Sensitivity(± 1 %)(Charge Input @ 100 Hz)	0.1-10.0 mV/pC	0.1-10.0 mV/pC
Low Frequency Response(-5 %)(ICP® Input)	≤ 0.05 Hz	≤ 0.05 Hz
Low Frequency Response(-5 %)(Charge Input)	0.5 Hz	0.5 Hz
High Frequency Response(-3 dB)(Gain from x0.1 to x99.9)	>100 kHz	>100 kHz
High Frequency Response(-3 dB)(Gain from x100 to x200)	>80 kHz	>80 kHz
Filter Type(4-pole)	Low Pass	Low Pass
Electrical Filter Corner Frequency(-3 dB)	10 kHz	10 kHz
Electrical Filter Roll-off	24 dB/octave	24 dB/octave
Electrical Filter Pass Band Amplitude Accuracy	1 %	1 %
Phase Response(at 1 kHz)	± 2 °	± 2 °
Non-Linearity	1 %	1 %
Cross Talk	<72 dB	<72 dB
TEDS Sensor Support	Yes	Yes
Fault/Bias Monitor/Meter	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	≤ 0.85 Amps	≤ 0.85 Amps
Excitation Voltage(To Sensor)	>24 VDC	>24 VDC
DC Offset	<50 mV	<50 mV
Constant Current Excitation(To Sensor)(Non-Isolated Mode)	2 to 20 mA	2 to 20 mA
Constant Current Excitation(± 0.6 mA)(Isolated Mode)	4 mA	4 mA
Output Voltage	10 V	10 V
Output Current	50 mA	50 mA
Output Impedance	<50 Ohm	<50 Ohm
Overload Threshold(± 0.5 Vpk)	± 10 Vpk	± 10 Vpk
Discharge Time Constant(± 25 %)(Charge Input)	1 sec	1 sec
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x1)	50 µV/rms	50 µV/rms
Spectral Noise(1 Hz)	8 µV/√Hz	8 µV/√Hz
Spectral Noise(10 Hz)	2 µV/√Hz	2 µV/√Hz
Spectral Noise(100 Hz)	0.7 µV/√Hz	0.7 µV/√Hz
Spectral Noise(1 kHz)	0.7 µV/√Hz	0.7 µV/√Hz
Spectral Noise(10 kHz)	0.6 µV/√Hz	0.6 µV/√Hz
Broadband Electrical Noise(1 to 10,000 kHz)(Gain x10)	75 µV rms	75 µV rms
Spectral Noise(1 Hz)	18 µV/√Hz	18 µV/√Hz
Spectral Noise(10 Hz)	1.5 µV/√Hz	1.5 µV/√Hz
Spectral Noise(100 Hz)	1.0 µV/√Hz	1.0 µV/√Hz
Spectral Noise(1 kHz)	1.0 µV/√Hz	1.0 µV/√Hz
Spectral Noise(10 kHz)	1.0 µV/√Hz	1.0 µV/√Hz
Broadband Electrical Noise(1 to 10,000 Hz)(Gain x100)	350 µV rms	350 µV rms
Spectral Noise(1 Hz)	100 µV/√Hz	100 µV/√Hz
Spectral Noise(10 Hz)	10 µV/√Hz	10 µV/√Hz
Spectral Noise(100 Hz)	6 µV/√Hz	6 µV/√Hz
Spectral Noise(1 kHz)	5 µV/√Hz	5 µV/√Hz
Spectral Noise(10 kHz)	5 µV/√Hz	5 µV/√Hz
Broadband Electrical Noise(1 to 10,000 Hz)(0.1 mV/pC & Gain x1)	52.0 µV rms	52.0 µV rms
Spectral Noise(1 Hz)	10.0 µV/√Hz	10.0 µV/√Hz
Spectral Noise(10 Hz)	1.5 µV/√Hz	1.5 µV/√Hz
Spectral Noise(100 Hz)	0.6 µV/√Hz	0.6 µV/√Hz
Spectral Noise(1 kHz)	0.6 µV/√Hz	0.6 µV/√Hz
Spectral Noise(10 kHz)	0.6 µV/√Hz	0.6 µV/√Hz
Broadband Electrical Noise(1 to 10,000 Hz)(1.0 mV/pC & Gain x1)	52.0 µV rms	52.0 µV rms
Spectral Noise(1 Hz)	14.0 µV/√Hz	14.0 µV/√Hz
Spectral Noise(10 Hz)	2.0 µV/√Hz	2.0 µV/√Hz
Spectral Noise(100 Hz)	0.7 µV/√Hz	0.7 µV/√Hz
Spectral Noise(1 kHz)	0.7 µV/√Hz	0.7 µV/√Hz
Spectral Noise(10 kHz)	0.7 µV/√Hz	0.7 µV/√Hz
Broadband Electrical Noise(1 to 10,000 Hz)(10.0 mV/pC & Gain x1)	56.0 µV/rms	56.0 µV/rms
Spectral Noise(1 Hz)	15.0 µV/√Hz	15.0 µV/√Hz
Spectral Noise(10 Hz)	2.0 µV/√Hz	2.0 µV/√Hz
Spectral Noise(100 Hz)	0.6 µV/√Hz	0.6 µV/√Hz
Spectral Noise(1 kHz)	0.6 µV/√Hz	0.6 µV/√Hz
Spectral Noise(10 kHz)	0.6 µV/√Hz	0.6 µV/√Hz
Electrical Isolation(Selectable)(Channel-to-channel signal grounds)	Isolated/Non-isolated	Isolated/Non-isolated
Electrical Isolation(Selectable)(Input-to-output signal grounds)	Isolated/Non-isolated	Isolated/Non-isolated
Oscillator(+/- 2%)(Internal Generator - ICP Mode)	0.1 V pk 100/1000 Hz	0.1 V pk 100/1000 Hz
Oscillator(+/- 2%)(Internal Generator - Charge Mode)	100 pC pk 100/1000 Hz	100 pC pk 100/1000 Hz
External Calibration Input(+/- 1%)(ICP Mode Input Gain)	1 V/V	1 V/V
External Calibration Input(+/- 1%)(Charge Mode Input Gain)	1000 pC/V	1000 pC/V
Physical		
Electrical Connector(Input, sensor)	BNC Jack	BNC Jack
Electrical Connector(Output)	BNC Jack	BNC Jack
Electrical Connector(External Cal)	10-32 Coaxial Jack	10-32 Coaxial Jack
Electrical Connector(Ethernet)	RJ-45	RJ-45
Size (Height x Width x Depth)(nominal)	1.75 in x 19 in x 13.7 in	44.5 mm x 482.6 mm x 348 mm
Weight	8 lb	3.6 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] User adjustable, factory set at 4 mA (± 1.0 mA). One control adjusts all channels.
 - [2] Typical.
 - [3] The low frequency tolerance is accurate within ±25% of the specified frequency.
 - [4] Assumes input resistance >10 MOhms. Lower input resistance can be used, but will degrade performance.
 - [5] The high frequency tolerance is accurate within ±5% of the specified frequency.
 - [6] See PCB Declaration of Conformance PS024 for details.

SUPPLIED ACCESSORIES:				
Model 017AXX Power Cord (1)				
Model EE75 PCB MCSC Control Software. (1)				
Entered: AP	Engineer: AJP	Sales: JJM	Approved: JWH	Spec Number:
Date: 3/21/2013	Date: 3/21/2013	Date: 3/21/2013	Date: 3/21/2013	38090