


Model Number 422E13		IN-LINE CHARGE CONVERTER		Revision: T ECN #: 45760	
Performance		ENGLISH		SI	
Sensitivity(± 2 %)(Charge Conversion)		1 mV/pC		1 mV/pC	
Overrange		± 3 V		± 3 V	
Low Frequency Response(-5 %)		5 Hz		5 Hz	
High Frequency Response(2.2 mA)		30 kHz		30 kHz	
High Frequency Response(4 mA)		60 kHz		60 kHz	
High Frequency Response(20 mA)		100 kHz		100 kHz	
Non-Linearity		≤ 1.0 % FS		≤ 1.0 % FS	
Environmental					
Temperature Range(Operating)		-65 to +250 °F		-54 to +121 °C	
Temperature Response(Sensitivity Deviation)		<1 %		<1 %	
Maximum Shock		1000 g pk		9810 m/s² pk	
Electrical					
Excitation Voltage		18 to 28 VDC		18 to 28 VDC	
Output Bias Voltage		12.75 to 14.25 VDC		12.75 to 14.25 VDC	
Output Voltage(at specified measurement range)		± 2.5 Vpk		± 2.5 Vpk	
Constant Current Excitation		2.2 to 20 mA		2.2 to 20 mA	
Output Impedance		<20 Ohm		<20 Ohm	
Output Polarity		Inverted		Inverted	
Maximum Input Voltage		30 V		30 V	
Broadband Electrical Noise(1 to 10,000 Hz)		11 µV		-99 dB	
Spectral Noise(1 Hz)		10.0 µV/√Hz		-100 dB	
Spectral Noise(10 Hz)		0.7 µV/√Hz		-123 dB	
Spectral Noise(100 Hz)		0.1 µV/√Hz		-140 dB	
Spectral Noise(1 kHz)		0.04 µV/√Hz		-148 dB	
Spectral Noise(10 kHz)		0.04 µV/√Hz		-148 dB	
Discharge Time Constant		0.1 sec		0.1 sec	
Resistance(Minimum required at input)		7,000,000 Ohm		7,000,000 Ohm	
Source Capacitance Loading		0.0005 %/pF		0.0005 %/pF	
Physical					
Housing Material		Stainless Steel		Stainless Steel	
Sealing		Welded		Welded	
Electrical Connector(Input)		10-32 Coaxial Jack		10-32 Coaxial Jack	
Electrical Connector(Output)		BNC Jack		BNC Jack	
Size (Diameter x Length)		0.52 in x 3.4 in		13 mm x 86 mm	
Weight		1.15 oz		32.7 gm	
					
[4]					
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.					