



Model Number 422E11	IN-LINE CHARGE CONVERTER			Revision: P ECN #: 26184
Performance	ENGLISH	SI		OPTIONAL VERSIONS
Sensitivity(± 5 %)(Charge Conversion)	100 mV/pC	100 mV/pC		Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used. T - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4 Temperature Range(Operating) -40 to +185 °F -40 to +85 °C Output Bias Voltage 13.35 to 14.85 VDC 13.35 to 14.85 VDC
Input Range(Electrical Charge)	± 25 pC	± 25 pC		
Overrange	± 3 V	± 3 V		
Low Frequency Response(-5 %)	5 Hz	5 Hz		
High Frequency Response(2.2 mA)	60 kHz	60 kHz	[3]	
High Frequency Response(4 mA)	90 kHz	90 kHz	[3]	
High Frequency Response(20 mA)	110 kHz	110 kHz	[3]	
Non-Linearity	≤ 1.0 % FS	≤ 1.0 % FS		
Environmental				
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C		
Temperature Response(Sensitivity Deviation)	<2 %	<2 %		
Maximum Shock	1000 g pk	9810 m/s ² pk		
Electrical				
Excitation Voltage	18 to 28 VDC	18 to 28 VDC		
Constant Current Excitation	2.2 to 20 mA	2.2 to 20 mA		
Output Voltage(at specified measurement range)	± 2.5 Vpk	± 2.5 Vpk		
Output Impedance	<20 ohm	<20 ohm		
Output Bias Voltage	12.75 to 14.25 VDC	12.75 to 14.25 VDC		
Output Polarity	Inverted	Inverted		
Maximum Input Voltage	30 V	30 V		
Broadband Electrical Noise(1 to 10,000 Hz)	60 µV	-84 dB	[1]	
Spectral Noise(1 Hz)	44 µV/√Hz	-87 dB	[1]	
Spectral Noise(10 Hz)	8.0 µV/√Hz	-102 dB	[1]	
Spectral Noise(100 Hz)	1.0 µV/√Hz	-120 dB	[1]	
Spectral Noise(1 kHz)	0.2 µV/√Hz	-134 dB	[1]	
Spectral Noise(10 kHz)	0.1 µV/√Hz	-140 dB	[1]	
Discharge Time Constant	0.1 sec	0.1 sec		
Resistance(Minimum required at input)	2x10 ⁸ ohm	2x10 ⁸ ohm	[2]	
Source Capacitance Loading	0.005 %/pF	0.005 %/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		
	<p>[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.</p>			
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Entered: JAA	Engineer: JSD	Sales: JSM	Approved: CMH	Spec Number:
Date: 4-3-07	Date: 4-5-07	Date: 4-5-07	Date: 4/5/07	422-5110-80
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