



Model Number		IN-LINE CHARGE CONVERTER			Revision: F										
422E16					ECN #: 26184										
Performance		ENGLISH	SI		OPTIONAL VERSIONS										
Sensitivity(± 2 %)(Charge Conversion)		0.25 mV/pC	0.25 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.										
Input Range(Electrical Charge)		± 10,000 pC	± 10,000 pC		T - TEDS Capable of Digital Memory and Communication Compliant with IEEE P1451.4										
Overrange		± 3 V	± 3 V		Temperature Range(Operating)										
Low Frequency Response(-5 %)		5 Hz	5 Hz		-40 to +185 °F -40 to +85 °C										
High Frequency Response(2.2 mA)		30 kHz	30 kHz	[3]	Output Bias Voltage										
High Frequency Response(4 mA)		60 kHz	60 kHz	[3]	13.35 to 14.85 VDC 13.35 to 14.85 VDC										
High Frequency Response(20 mA)		100 kHz	100 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)		<1 %	<1 %												
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)		14.0 µV	-97 dB	[1]											
Spectral Noise(1 Hz)		11.2 µV/√Hz	-99 dB	[1]											
Spectral Noise(10 Hz)		0.8 µV/√Hz	-122 dB	[1]											
Spectral Noise(100 Hz)		0.1 µV/√Hz	-140 dB	[1]											
Spectral Noise(1 kHz)		0.05 µV/√Hz	-146 dB	[1]											
Spectral Noise(10 kHz)		0.03 µV/√Hz	-150 dB	[1]											
Discharge Time Constant		0.1 sec	0.1 sec												
Resistance(Minimum required at input)		7,000,000 ohm	7,000,000 ohm	[2]											
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.															
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				<table border="1"> <tr> <td>Entered: <i>JH</i></td> <td>Engineer: <i>DD</i></td> <td>Sales: <i>JDM</i></td> <td>Approved: <i>CMD</i></td> <td>Spec Number:</td> </tr> <tr> <td>Date: <i>4-3-07</i></td> <td>Date: <i>4-5-07</i></td> <td>Date: <i>4-5-07</i></td> <td>Date: <i>4/5/07</i></td> <td>17023</td> </tr> </table>		Entered: <i>JH</i>	Engineer: <i>DD</i>	Sales: <i>JDM</i>	Approved: <i>CMD</i>	Spec Number:	Date: <i>4-3-07</i>	Date: <i>4-5-07</i>	Date: <i>4-5-07</i>	Date: <i>4/5/07</i>	17023
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