

Model Number 422E65/A		IN-LINE CHARGE CONVERTER			Revision: D ECN #: 39690	
Performance		ENGLISH	SI	OPTIONAL VERSIONS		
Sensitivity(± 2 %)(Charge Conversion)		1 mV/pC	1 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		± 5000 pC	± 5000 pC			
Low Frequency Response(-5 %)		5 Hz	5 Hz			
High Frequency Response(4 mA)		35 kHz	35 kHz			
Non-Linearity		≤ 1.0 % FS	≤ 1.0 % FS	NOTES: [1] Tested using voltage source and input capacitor equal to the feedback capacitor, to simulate a charge output sensor. [2] The low frequency response is accurate within ±25% of the specified frequency [3] Slew rate limiting may result at higher frequencies. [4] See PCB Declaration of Conformance PS024 for details. A low impedance connection from case to earth ground is required to maintain CE compliance.		
Environmental						
Temperature Range(Operating)		-65 to +250 °F	-54 to +121 °C			
Maximum Shock		1000 g pk	9810 m/s² pk			
Humidity Range		100 %	100 %			
Radiation Exposure Limit(Integrated Gamma Flux)		≤ 1 Mrad	≤ 1 Mrad			
Radiation Exposure Limit(Integrated Neutron Flux)		≤ 10¹⁰ N/cm²	≤ 10¹⁰ N/cm²			
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		± 5 V	± 5 V			
Output Impedance		<20 Ohm	<20 Ohm			
Output Bias Voltage		9 to 14.5 VDC	9 to 14.5 VDC			
Broadband Electrical Noise(1 to 10,000 Hz)		7.0 µV	-103 dB			
Spectral Noise(1 Hz)		5.0 µV/√Hz	-106 dB			
Spectral Noise(10 Hz)		1.0 µV/√Hz	-120 dB			
Spectral Noise(100 Hz)		0.1 µV/√Hz	-140 dB			
Spectral Noise(1 kHz)		0.1 µV/√Hz	-140 dB			
Spectral Noise(10 kHz)		0.05 µV/√Hz	-146 dB			
Capacitance(Maximum allowable at input)		20,000 pF	20,000 pF			
Discharge Time Constant		≥ 0.1 sec	≥ 0.1 sec			
Resistance(Minimum required at input)		10,000 Ohm	10,000 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)		10-32 Coaxial Jack	10-32 Coaxial Jack			
Size (Diameter x Length)		0.50 in x 3.0 in	13 mm x 76 mm	Entered: AP Engineer: AJP Sales: JJM Approved: JWH Spec Number: Date: 1/31/2013 Date: 1/31/2013 Date: 1/31/2013 Date: 1/31/2013 31909		
Weight		0.8 oz	23 gm			
CE						
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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PCB PIEZOTRONICS 3425 Walden Avenue, Depew, NY 14043						
Phone: 716-684-0001 Fax: 716-684-0987 E-Mail: info@pcb.com						