## CUSTOM CHARGE AMPLIFIER PERFORMANCE SPECIFICATIONS



Transducer Capacitance - Internal switch-selectable nominal values:

 $0.1~\rm nF$ ,  $0.22~\rm nF$ ,  $0.33~\rm nF$ ,  $0.47~\rm nF$ ,  $1.0~\rm nF$ ,  $2.2~\rm nF$ ,  $3.3~\rm nF$   $4.7~\rm nF$   $10~\rm nF$  (any multiple combination may be selected to achieve a large range of capacitance values with constant low frequency

corner)

Gain - 0 dB (nominal) with -20 dB and + 20 dB per jumper selection

Bandwidth - 33 kHz - 2 MHz nominal

+/- 1 dB 70 kHz to 2 MHz
- 3 dB at 42 kHz and 3 MHz

Self-Noise Output - 3 µV rms in a 50 kHz bandwidth (in the range 33 kHz to 2

MHz) with the output buffer set to 0 dB gain

Distortion - The basic harmonic distortion at less than 0.1% for output

amplitudes less than 2.5 V pk at 1 MHz. The output slew rate

limit for the amplifiers is  $380 \text{ V/}\mu\text{second}$ .

Output Impedance -  $150\Omega$ 

Output Voltage - 6V p-p maximum at unity gain and 500 kHz (1 nF C<sub>in</sub> and

>1k $\Omega$  load resistance)

No of Channels - 4 independent channels

Input/output connections - BNC coaxial

Power Supply - 12 VDC @ 50 mA

Package - approximately 160 x 100 x 80 mm rectangular die-cast

enclosure