

## PERFORMANCE SPECIFICATIONS<sup>1</sup>

### 1. ELECTRICAL

Transducer Capacitance	-	Internal switch-selectable nominal values: 10 pF, 22 pF, 33 pF, 47 pF, 100 pF, 220 pF, 330 pF, 470 pF and 1000 pF (any multiple combination may be selected to achieve a large range of capacitance values with constant low frequency corner)
Gain Settings	-	0 dB (nominal) with -20 dB and + 20 dB per switch selection <sup>2</sup>
Bandwidth	-	32 kHz - 10 MHz nominal +/- 1 dB 70 kHz to 4 MHz - 3 dB at 32 kHz and ~20 MHz (for 0db gain setting)
Self-Noise Output	-	500 $\mu$ Vrms total (in the full bandwidth of 33 kHz to 20 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 amplifier stages is 125 V/ $\mu$ second.
Input Impedance	-	<5 $\Omega$
Output Impedance	-	<20 $\Omega$
Output Voltage	-	6V p-p maximum at unity gain and 500 kHz (1 nF $C_{in}$ and >1k $\Omega$ load resistance)
Power Supply	-	12 - 15 VDC @ 100 mA

### 2. PHYSICAL

No of Channels	-	4 independent channels
Input/output connections	-	BNC coaxial
Package	-	approximately 160 x 100 x 80 mm rectangular die-cast enclosure



**Wide-band Charge Amplifier**

<sup>1</sup> Specifications parameters may change without notice.

<sup>2</sup> Note that selecting +20 dB gain will result in a bandwidth reduction since the output amplifier is not able to maintain this level of gain out to 10 MHz.