

Specifications

Appendix A

General

DC coupled current to voltage amplifier with adjustable sensitivity and a maximum frequency response extending from DC to 200 kHz. Adjustable negative detector bias. Single-ended virtual ground input and single-ended DC coupled output via BNC connectors.

Powered from external DC power supplies that can be provided by most **SIGNAL RECOVERY** lock-in amplifiers or a separate line power supply module.

Input

Sensitivity	10^{-4} A/V to 10^{-9} A/V in six ranges
Overload Indicator	Indicates that instantaneous (DC plus peak AC) current has exceeded amplifier capability - see table A-1
Frequency Response	see table A-1 and Figure A-1

Sensitivity (A/V)	Max DC Input Current at 1 kHz	Frequency Response, DC to
10^{-4}	1 mA	200 kHz
10^{-5}	100 μ A	200 kHz
10^{-6}	10 μ A	100 kHz
10^{-7}	1 μ A	50 kHz
10^{-8}	100 nA	10 kHz
10^{-9}	10 nA	1 kHz

Table A-1, Max DC Input and Frequency Response vs. Sensitivity

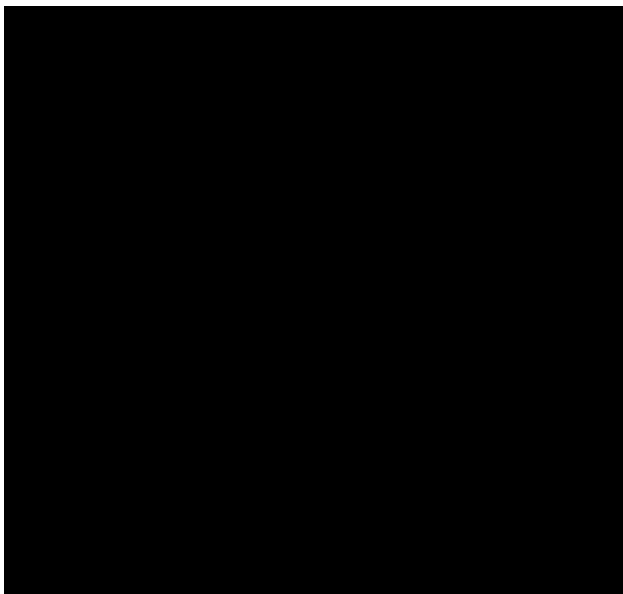


Figure A-1, Frequency Response

Input Impedance

See Figure A-2



Figure A-2, Input Impedance

Noise Current See Figure A-3

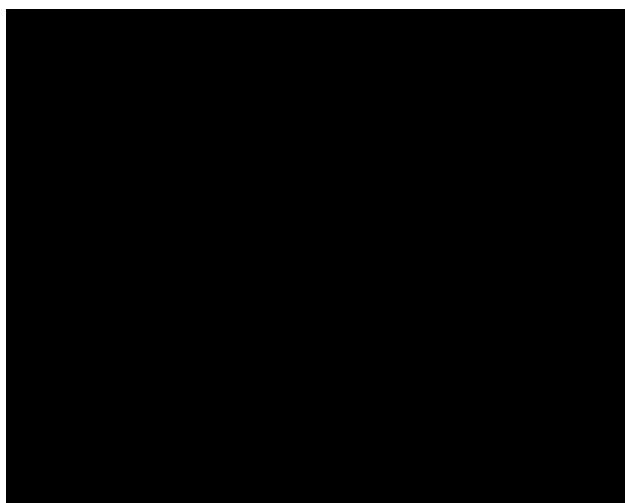


Figure A-3, Noise Current

Outputs

Monitor Output	600 Ω rear-panel BNC connector permits monitoring of the output signal
Main Output	
Level	6.5 V rms maximum
Impedance	1 k Ω nominal
Output Attenuator	Provides optional 1:10 attenuation of output voltage

Power

 $\pm 15\text{ V}$ or $\pm 24\text{ V}$ at 30 mA

General

Dimensions (excluding connectors)	4.5" wide × 6.6" long × 2.7" high (114 mm wide × 168 mm long × 69 mm high)
Shipping Weight	2.2lbs (1 kg)