

EM55/SPX VOLTAGE MODE PREAMPLIFIER

This preamplifier is designed for low impedance HgCdTe photoconductors and provides dual outputs: a first stage DC coupled out, and a second stage x10 AC coupled out. The DC offset level is adjustable via a screw potentiometer, and for most applications should be set just prior to measurements. The detectors have a DC bias which is sensitive to detector temperature and to the ambient background temperature. For detector/amplifier units supplied as a system, the detector bias is set internally and needs no external adjustment. For stand-alone applications, the preamplifier can be supplied with external pins for a changeable bias resistor. Care must be taken to insure that the power supplies are noise free. EOS supplies a Model PS-1 power supply for non-TE-cooled detectors and a Model PS/TC-1 power supply/controller for TE-cooled units. Consult the factory for details

SPECIFICATIONS

Voltage Gain	50 V/V, LO OUT
.....	500 V/V, HI OUT
Bandwidth (-3db)	DC - 100kHz, LO OUT
.....	1kHz - 100kHz, HI OUT
Equivalent Input Noise	0.9 nV/Hz ^{1/2}
Connections	BNC IN, BNC OUT (2), Shielded cable power
Power Requirement	+,- 9VDC to +,- 15VDC; 100Ma
Size	1.5" x 2.75" x .875" plus connectors