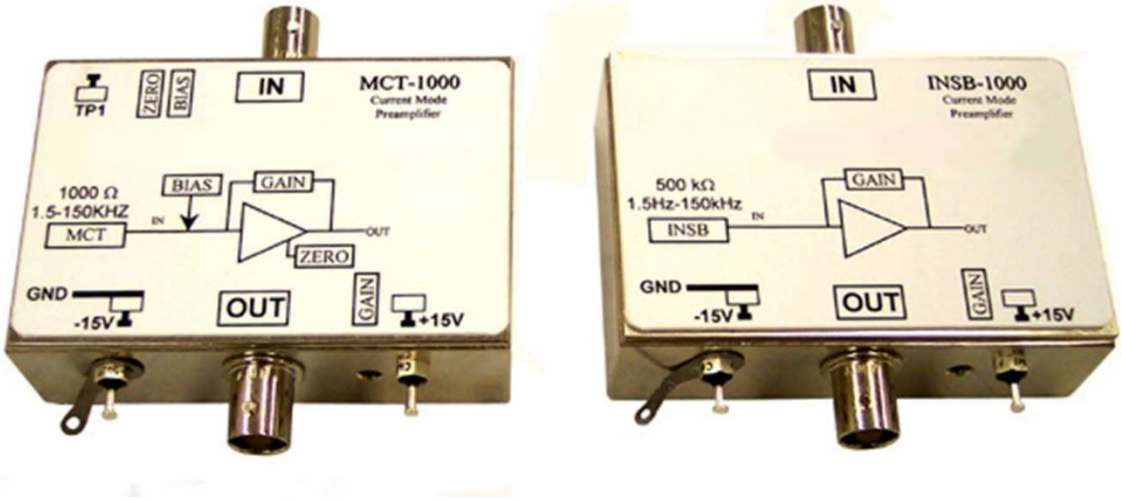
InfraRed ASSOCIATES, Inc.

Pre-Amplifiers

TECHNICAL DATA & INFORMATION



MCT-1000 Pre-Amp for MCT(HgCdTe) Detectors

The **MCT-1000** was specifically designed to operate with Photoconductive Mercury Cadmium Telluride detectors. The low noise and high gain aspects coupled with a precision constant voltage bias provide an ideal complement to **InfraRed Associates, Inc.** HgCdTe detectors.

The **MCT-1000** preamplifier provides the MCT detector with all of the interface circuitry required for optimum operation. No external bias or load resistors are required.

The MCT detector is connected to the input BNC connector with an SMA-BNC cable

INSB-1000 Pre-Amp for InSb Detectors

The **INSB-1000** was specifically designed to operate with Photovoltaic Indium Antimonide detectors. The low noise and high gain aspects, together with a zero volt bias, provide an ideal compliment to **InfraRed Associates, Inc.** InSb detectors.

The **INSB-1000** preamplifier provides the InSb detector with all of the interface circuitry required for optimum operation. No external bias or load resistors are required. The preamplifier is detector noise limited.

typically supplied with the detector. Positive and negative 15 Volt DC power supplies with at least 200mA(+15V) and 100mA(-15V) output are required. The detector bias is internally provided, and the bias voltage (or current) is adjustable from typically 0V to +2.5V. The electrical bandwidth is internally set to 1.5Hz to 150KHz. Other bandwidths are available. Contact us to discuss your specific requirements.

Adjustable gain provides variable signal amplitude typically from 50 to 1000 times. The Bias voltage and gain are affected by the detector impedance, and as all detectors are slightly different in resistance, there will be a slight variation in maximum bias voltage and maximum gain.

The InSb detector is connected to the input BNC connector with an SMA-BNC cable typically supplied with the detector. Positive and Negative 15 Volt DC supplies with at least 100mA output are required. The electrical bandwidth is internally set to 1.5HZ to 150KHz. Other bandwidths (up to 5MHz) are available.

Adjustable gain provides variable signal amplitude typically from 5 to 100 times.

Special configurations for high speed and reverse biasing are available. Contact us to discuss your specific requirements