AMP-1BB-AE Broadband Preamplifier for Standard AE Sensors



AMP-1BB-AE with KRN150 sensor

The KRN **AMP-1BB-AE** is a single channel broadband preamplifier designed to interface standard non-preamplied sensors to your Data Acquisition System or AE Test System for signal capture and analysis. The wide frequency range allows use with a variety of sensors including the KRNBB-PCP pulsable broadband sensor, the KRN150, KRNm500, and KRN300, among others. The **AMP-1BB-AE** is also compatible with most non-preamplified sensors from other manufacturers.

The **AMP-1BB-AE** has an internal universal-input AC/DC power supply. The **AMP-1BB-AE** can be used with an external DC power supply if preferred. External DC power can be connected to a BNC connector on the rear panel and a power source selector switch is used to choose the power source.

The **AMP-1BB-AE** provides 40dB of gain over a broad spectrum of frequencies.

A unique feature of the **AMP-1BB-AE** is the "power jumper" connectors. These amplifiers have both male and female AC power connectors allowing amplifiers to be "chained" together from a single AC outlet. This greatly reduces power cabling when using multiple amplifiers.

Typical Preamplifier Electrical Characteristics:

Bandwidth (3dB)

Gain

Input Noise

Input Resistance:

20 kHz to >2.0 MHz

40dB (measured at 500kHz)

≤ 10mV(sensor with 6 ft cable):

453 ohm (Configured to bias jfet)

Input Capacitance: DC isolation (10uF 50v)

Input Protection: NA

Maximum Output Voltage: 24V (clip)
Output Impedance: 50 ohm

Output Noise 2.3mV (External DC Supply)

 $5.6mV \; (Internal \; AC \; Supply)$

Input power – selectable: 90-264 VAC 50-60Hz or

24-28 VDC

Mechanical Specifications

Dimensions mm: 216W x 133H x 254D

(in: 8.5W x 5.25H x 10.0D)

Weight 853g (1.88lb)

Connectors

Sensor In/Out: BNC (50 ohm)
Power in AC: IEC320-C14
Power out AXC: IEC320-C13

Power DC (external): BNC (50 ohm, switched)



AMP-1BB-AE back panel



AMP-1BB-AE "power jumper"