

## Features

**Broadband:** 1 - 6 GHz

**High Gain:** 30 dB

**Flat Response:**  $\pm 1.5$  dB

**Individual Calibration**

**Three Year Warranty**



## Description

The model PAM-6000 is a broadband, high gain, bench top RF and microwave preamplifier. It increases measurement sensitivity of the spectrum analyzer or an EMC receiver to low amplitude signals during emi emissions testing. The PAM-6000 operates from 1 to 6 GHz and has a gain flatness  $\pm 1.5$  dB for the entire frequency range.

The preamplifier can be powered by the supplied wall mount DC adapter or the internal rechargeable batteries. The same DC adapter is also used to charge the batteries. With fully charged batteries the preamplifier can operate up to 6 hours. If the batteries need to be replaced they can be easily accessed from the rear panel.

The simple front panel consists of two 50Ω type N connectors for RF input and output, power switch and a battery low indicator.

Each preamplifier is individually calibrated and the gain data and certificate of calibration is shipped with the unit.

## Application

The PAM-6000 is primarily used for EMC radiated emissions testing. Some EMC standards that may need a preamplifier during the test are FCC Part 15, CISPR 22, DO-160 and Mil-Std 461. This preamplifier could also be used in other applications that require a high gain preamplifier in its operating range.

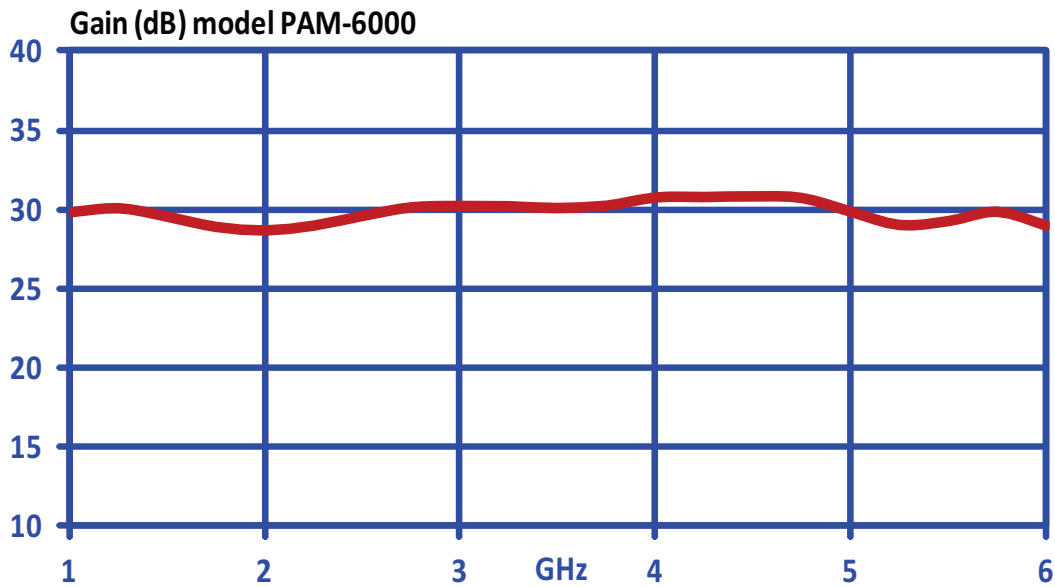
The enhanced system sensitivity due to high gain is very helpful when making EMC measurements using antennas on an EMI test site or for locating EMI emissions on a printed circuit board using near field probes. This allows measurements of those frequencies that are not visible on the spectrum analyzer or Receiver display unless amplified. The preamplifier gain will cause peaks to be visible above the background noise of the analyzer. These frequencies may go undetected if a preamplifier with a high gain was not used.

In addition, preamplifiers could improve sensitivity of counters and power meters. The PAM-6000 can also be used to increase the available power from your sweeper or signal generator.

# Specifications

<b>Model:</b>	PAM-6000
<b>Frequency:</b>	1 GHz - 6 GHz
<b>Gain:</b>	30 dB
<b>Flatness:</b>	± 1.5 dB
<b>P1dB:</b>	+13 dBm
<b>VSWR Input /Output:</b>	2:1 / 1.8:1
<b>Noise Figure:</b>	4 dB typical
<b>Impedance:</b>	50 Ω
<b>Max. Input:</b>	10 VDC, 2 dBm
<b>Connector Type:</b>	N type (f)
<b>Input Power:</b>	6 VDC, 500 mA
<b>Battery Pack:</b>	6 V, 0.7 A NimH
<b>Dimensions (L x W x H):</b>	7.5 x 5 x 3 inches / 9 x 13 x 7.6 cm
<b>Weight:</b>	3.3 lbs. / 1.5 kg

## Typical Gain



All specifications are subject to change without notice.  
All values are typical, unless specified.