



# 150A EMC Probe Amplifier



## Description

The 150A EMC probe amplifier is a low-noise, wide-bandwidth amplifier designed for use with the Beehive Electronics 100 series EMC probes.

The 150A is typically placed between the EMC probe and the spectrum analyzer. Its high gain and low noise improve the system sensitivity dramatically. This higher sensitivity allows the user to widen the spectrum analyzer resolution bandwidth, resulting in faster sweeps and measurements. Depending on the model of spectrum analyzer used, sensitivity can be improved by 20 to 30 dB.

## Features

- High gain and low noise improves measurement sensitivity and speed.
- Wide bandwidth allows it to be used with all 100 series probes.
- RF input and output protected against ESD and DC power.
- AC power supply included.
- Standard 50 ohm inputs and outputs allow it to be used in any application requiring a low noise amplifier.

# Specifications

## Gain

32 dB

## Frequency Response

100 kHz to 6.0 GHz:  $\pm 1.5$  dB

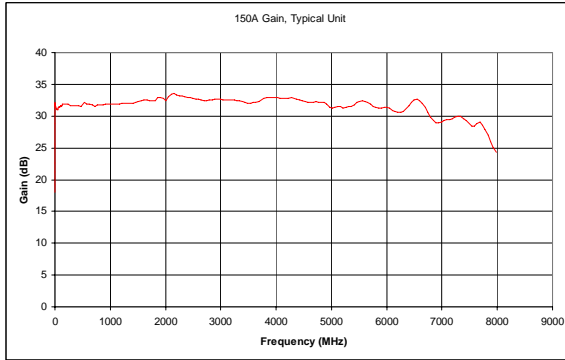


Fig 1: Typical frequency response

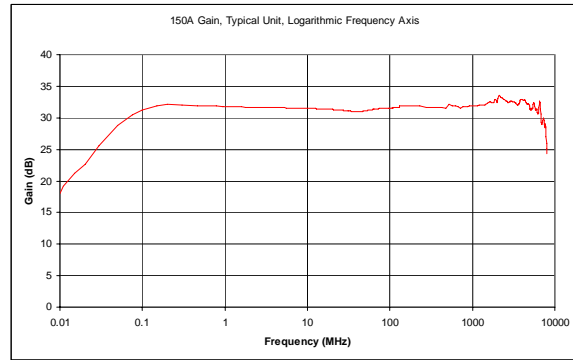


Fig 2: Typical freq. response, log scale

## Noise Figure

5 dB typical, 100 kHz to 4.0 GHz

6 dB typical, 4.0 GHz to 6.0 GHz

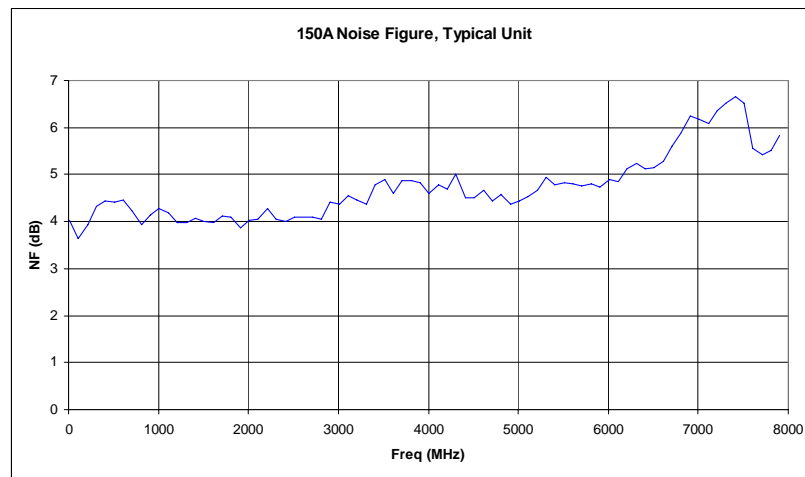


Fig 3: Typical noise figure

## 1dB Output Compression Point

+10 dBm, 100 kHz - 2 GHz

+5 dBm, 2 GHz – 6 GHz

## Port Characteristics

### *Impedance*

50 ohms nominal

### *Maximum Input Power*

+15 dBm

### *Maximum DC Voltage*

+/- 10 VDC

### *Connector*

SMA female

## Power

DC power input: +9VDC, 150 mA

Connector: DC power jack, 2mm center pin, positive center

Universal power supply (100-240 VAC, 50/60 Hz) included

## Environmental

Operating temperature: 0C to 55C

Storage temperature: -20C to 70C

## Dimensions

Height: 1.4"

Width: 4.3"

Depth: 4.2"

## Warranty

1 year warranty

30 day unconditional return policy