

# **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.
  - 1 Beehive Electronics · Tel: (707) 824-9206 · info@beehive-electronics.com rev. 1.0 8555 Lawrence Lane, Sebastopol CA 95472

# Specifications

#### Gain

32 dB

#### **Frequency Response**

100 kHz to 6.0 GHz: +/- 1.5 dB

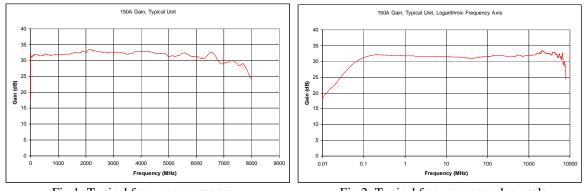


Fig 1: Typical frequency response

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

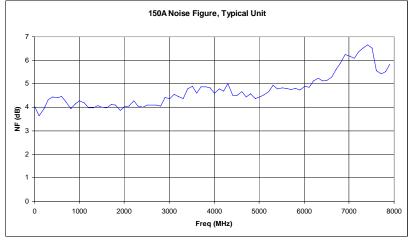


Fig 3: Typical noise figure

#### **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

year warranty
day unconditional return policy

