



HIGH PERFORMANCE

HF RECEIVING SYSTEMS & COMPONENTS

Hi-Z Antennas™ Hi-Z PLUS6 Amplifier



Hi-Z PLUS6 Amplifier

The Hi-Z PLUS6 Amplifier was designed to provide amplification and matching between the short verticals and the phase controller in the Hi-Z phased array control systems. This amplifier is used on ALL Hi-Z phased array products. The amp is located at the base of each short vertical. The connecting wires must be short, in the range or 8-10 inches long. When dressing or routing the wires between the vertical and ground rod to the Hi-Z PLUS6 Amps, maintain as much separation between the ground and antenna wires as possible. If these wires are to close it will degrade the system performance. **The Hi-Z PLUS6 Amp MUST be Weatherproofed!!**

This high impedance amplifier was designed to amplify the signals received on shortened, unmatched vertical antennas for the 160, 80 and 40meter amateur radio bands. Its primary purpose is accurate antenna signal processing which allows the construction of high performance multiple element arrays. In typical operation the input is connected between ground and an insulated vertical antenna of 10 to

20 feet in length. The output then drives a 75 ohm coaxial cable to a suitable combiner. Typical parallel input impedance is 40Kohm and 20pf. and -3dB bandwidth is in excess of 70 MHz. Voltage gain is calibrated at 1.0. The unit features power from the coax and a red LED power indicator.

- Common mode isolation built in.
- Operates from 13.8 Volts DC. Approx. 40 ma.
- 75 ohm matched output impedance.
- L=4.6 W=2.6 H=1.6 (not including the terminals or connectors)
- Quality G-10 fiberglass circuit board
- Stainless screws for antenna input and plated type F for output connectors.

Please review our application and technical notes to gain ideas for mounting the Hi-Z PLUS6 amplifiers near the base of the verticals. See: http://www.hizantennas.com/hiz_verticals.htm

Features:

- Relay input (lightning and static protection, when power is off)
- Easy connections to the base of the vertical and ground



Terminals to Ground and Vertical



Hi-Z Amp RG6 Output

THANK YOU for selecting Hi-Z Antennas™.



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