

MARK-IV

HIGH-LINEAR 800 MHz SMR Broadband Bi-Directional Amplifier (BBDA)

Canam's Broadband Bi-Directional Amplifiers (M4-BBDA-8) are Class-B Signal Boosters per FCC 90.7 definition. They are designed to boost trunking or conventional two-way radio signals to extend coverage into shadowed areas or enclosed spaces (in-buildings or in-tunnels rebroadcasting).

The M4-BBDA-8 units are built with highly linear devices at both Input and Output stages to provide optimum performance, with high gain, high linearity, very low-spurious and Intermodulation issues. Efficiency, reliability and performance are achieved by employing advanced matching networks and combining techniques with quality components, machined housings and EMI/RFI filtering.

Optional RF/optical transceivers are available. These units have an exceptionally high dynamic range and incorporate Average Automatic Power Control (AAPC) for optimal optical power stability over the full temperature range, which allow for reliable RF over fiber interface using single mode fiber-optics.



FEATURES

Non-Spurious OLC

Non-Spurious Automatic Output Level Control Circuits (OLC or ALC) up to 40 dB that can operate into the gain compression range all the time, even with several carriers closely spaced (12.5 or 25 KHz), without producing Spurs or Intermodulation interference.

High-Power Amplifiers (HPA)

High-Power Amplifier modules (HPA) with very-high linearity for multi-carriers clean output spectrum, OIP3 > +60 dBm.

High-linear Low-Noise PreAmplifiers

Integrated System Noise Figure < 3 dB, Front-end OIP3 > +40 dBm, to deal with very high input levels near by the system head-end, without causing system overload or Intermodulation Interference. Very-high input spur-free dynamic range.

High Gain

Several configurations available upon request, up to 80 dB net gain.

PC-based Microcontroller

With LCD & KEYPAD for local operation, or PC interface with very friendly and comprehensive Graphical software application (GUI).

Bi-Directional Design with internal Duplexer for common antenna ports

Built-in Forward and Reverse RF Power Detectors and Current Sensors PC-controlled.

Built-in amplifier output stage circulator, for infinite load mismatch protection.

Built-in Thermal Overload protection

Rugged design

Wall-mount, NEMA4 or NEMA4X (IP66) rated enclosures, with natural convection cooling, no fans.

Fail-safe Status Signaling

Form C "dry-contact" relays for status outputs and Opto-Isolated Inputs for remote hardware commands.

Universal Auto-sensing AC/DC power supply, or DC/DC Converter for 24VDC-feed.

Built-in sample-test ports for non-intrusive maintenance.

Optional RF-over-Fiber Optic Link

Highly-Linear and Low-Noise RF/Fiber Transceivers can be built-in and integrated upon request.

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