

Bi-Directional Amplifier

Electrical Specifications

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| FCC Classification | Class B booster |
| Frequency Band | 150-176 MHz |
| Passband Width | ≥ 1.5 MHz |
| Stopband Width | ≥ 3.5 MHz |
| Amplifier Gain (Typ.) | 75 dB |
| System Gain (Typ.) | 60 dB |
| Amplifier O/P Power (Max.) | +37 dBm |
| Amplifier Bias Voltage | 13.6 VDC |
| Amplifier Noise Figure | 3.0 dB |
| System O/P Power | Note 1 |
| System Noise Figure | Note 2 |
| IP3 | +50 dBm |
| Nominal Impedance | 50 Ohm |
| VSWR (Max.) | 1.35:1 |
| RF Connectors | N Female |
| System Voltage | 115 VAC (Optional 12 VDC, 24 VDC, 48 VDC, 220 VAC) |
| Battery Backup | Optional Upgrade |

Mechanical Specifications

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|--------------------------------|--|
| Finish | Red |
| Enclosure Type | NEMA-4 |
| Product Dimensions (H x W x D) | 18.5" x 13.75" x 7.25" (458 x 350 x 184 mm) |
| Net Weight | 36.6 lbs (16.5 kg) |
| Shipping Dimensions | 24" x 18" x 10" (635 x 458 x 254 mm) |
| Ship Weight | 43 lbs (19.4 kg) |

Environmental Specifications

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|--------------------------|----------------------|
| Operating Temp. Range | -30°C to +60°C |
| Operating Humidity Range | 0-90% non-condensing |



EMR Bi-Directional Amplifiers (BDAs) provide two way (uplink and downlink) filtering and amplification of RF signals in buildings, tunnels or areas that are shaded from adequate RF signal coverage. In addition to the BDA, other devices needed for a distribution system include transmission line, power splitters, hybrid & directional couplers and indoor antennas. The use of radiating cable can also be used, particularly in tunnels and long corridors. The choice of distribution method depends on the nature of the structure in which signal enhancement is required.



Notes

Note 1: System output power is a function of the number of carriers incident on the system, the signal level of these carrier s to the signal enhancement system, gain of the PA's, and the insertion loss of the filters within the bidirectional system.

Note 2: System Noise Figure is the sum of the amplifier NF and the filter losses prior to the amplifier. The filter losses a re dependent on the passband width for the uplink frequencies, the passband width for the downlink frequencies, and the stop band between them.

WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR 90.219) online at www.fcc.gov/signal-boosters/registration. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of \$100,000 for each continuing violation.