

Professional Installation for Model BreezeNET PRO.11/AMP1440 System



Intended use

All BreezeCOM devices are used to provide high speed data connections to remote networks. The BreezeNET PRO.11/AMP2440 System is not intended nor is it marketed for home use. It is designed for use by commercial businesses only.

Installation

The installation of the Model BreezeNET PRO.11/AMP2440 System will be controlled. BreezeCOM will ensure that the professional doing the installation is made aware of the requirements so that the final installation complies with FCC rules. Specifically the installer must ensure that the EIRP of the transmitting antenna does not exceed the requirements of paragraph 15.247(b) by using an HP 437B power meter and an HP 8481B power sensor. Power meters that measures average power must not be used when installing the transmitter, amplifier and antenna combination.

It will be explicitly explained to the professional installer that they will install a 250mW or 500mW version of the amplifier based on the antenna to be used in the installation. (See attached chart and table). The output power of the BreezeNET PRO.11/AMP2440 System is limited to 250mW or 500mW, regardless of the loss of cable between the DC injector and the amplifier any length or type of 50 ohm coax transmission can be used. Specifically, the table attached will be used to set the output power to meet the EIRP during installation. The output peak power setting of 250 mW and 500 mW will be adjusted using the table below.

Since BreezeNET PRO.11/AMP2440 System are shipped labeled as "BreezeNET PRO.11/AMP2440-250 System" for a 250mW output and a "BreezeNET PRO.11/AMP2440-500 System" for a 500mW maximum output, the installer will be aware of the output power of the system. Further, all installations of the Model BreezeNET PRO.11/AMP2440 System will require topographic analysis, site survey and link budget calculation. Therefore, the system will require a BreezeCOMed trained professional to do the installation.

This ensures compliance with the maximum transmitter EIRP allowed with the antenna provided as a system.

The following statement is in the BreezeNET user's guide (section 5.5.1) and is also supplied as a separate sheet with each device sold:

"Professional Installers Only :

Detached antennas, whether installed indoors or out, should be installed ONLY by experienced antenna installation professionals who are familiar with local building and safety codes and, wherever applicable, are licensed by the appropriate government regulatory authorities. Failure to do so may void the BreezeNET product warranty and may expose the end user to legal and financial liabilities."

"Regulations regarding maximum antenna gains vary from country to country. It is the responsibility of the end user to operate within the limits of these regulations and to ensure that the professional installer is aware of these regulations, as well."

Marketing and sales channels

BreezeCOM DOES NOT sell direct to end users. BreezeNET PRO.11/AMP2440 System will be sold only to BreezeCOM's Authorized Resellers. Those authorized resellers are technically trained by BreezeCOM's Engineers periodically and must follow the rules set by BreezeCOM. The BreezeNET/AMP2440 system is designed for Long Range (10-25 miles) applications and it involves a complicated mandatory site survey, roof top mast installation, high gain antennas, accurate antenna alignment, etc. Those activities can be done ONLY by professional installers that are familiar with the FCC regulations. BreezeCOM do not play in the consumer business at all. We have no resellers in this market and we do not advertise in consumers based publications or attend consumer oriented trade shows. The system will be advertised in technical trade shows and magazines.

Conclusion

BreezeCOM requires professional installation for the Model BreezeNET PRO.11/AMP2440 System in-order to provide the highest reliable system possible. We therefore fully support the mandate for professional installation of our complete system.

| Uni-directional antennas vs EUT power out put setting | | | | | | | |
|---|------------|-------------------|-----------------------|----------------------------|------------------|---|-------------------------------------|
| Antenna Type | Gain (dBi) | Gain – 6dBi (dBi) | Reduction from 30 dBm | Max Power to Antenna (dBm) | EUT setting (mW) | Output setting per channel with the 30' low loss coax cable | Point-to-Point/ Point-to-Multipoint |
| UNI-24 | 24 | 18 | 6.0 | 24.0 | 250 | 234.4, @ Ch. 41 | Point-to-Point |
| UNI 21 | 21 | 15 | 5.0 | 25.0 | 250 | 234.4, @ Ch. 41 | Point-to-Point |
| UNI 18 | 18 | 12 | 4.0 | 26.0 | 250 | 245.5, @ Ch. 41 | Point-to-Point |
| UNI-16 | 16 | 10 | 3.33 | 26.7 | 250 | 234.4, @ Ch. 41 | Point-to-Point |
| UNI-16 | 16 | 10 | 3.33 | 26.7 | 500 | 446.7, @ Ch. 41 | Point-to-Point |
| UNI-13 | 13 | 7 | 2.33 | 27.7 | 500 | 446.7, @ Ch. 41 | Point-to-Point |

| Omni-directional antennas vs EUT power out put setting | | | | | | | | |
|--|------------|------------------|---------------------------|-----------------------|----------------------------|------------------|--|------------------------------------|
| Antenna Type | Gain (dBi) | Gain +6dBi (dBi) | limit +Antenna Gain (dBm) | Reduction from 30 dBm | Max Power to Antenna (dBm) | EUT setting (mW) | Output setting per channel with the 30' low loss coaxial cable | Point-toPoint/ Point-to-Multipoint |
| OMNI-12 | 12.0 | 42.0 | 36 | 6.0 | 24.0 | 250 | 234.4, @ Ch. 41 | Point-to-Multipoint |
| OMNI-8 | 8 | 38.0 | 36 | 2.0 | 28.0 | 500 | 446.7, @ Ch. 41 | Point-to-Multipoint |
| OMNI-6 | 6 | 36.0 | 36 | 0 | 30.0 | 500 | 446.7, @ Ch. 41 | Point-to-Multipoint |

