

Operational Description

FCCID: XEC-5X00

5.8 GHz WiMax CPE

EION Inc.

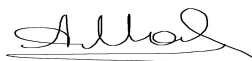
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A.1 Operational Description

The device is a WiMax CPE designed specifically for wireless networks. The device has an IEEE 802.16 radio and uses integral antennae with the gains of 16, 20, and 24 dBi, as well as directional external antennae. The transceiver operates in the frequency bands 5725-5850 MHz. The device transmits digital network data and is mounted in fixed point-to-point installations. There are no user serviceable parts inside the unit. It is factory sealed in a one-time use manner and inaccessible to the end user.

The type of RF modulation is OFDM used at 3.5, 5.0, and 7.0 MHz bands. The device can transmit data at a bit rate 25.9 Mbps in OFDM mode or a real-world data rate of approximately 20.88 Mbps. A 128 bits Wired Equivalent Privacy (WEP) algorithm is used for secure communications. The device's standard compliance ensures that it can communicate with a corresponding WiMax Base Station.

The firmware used with the device prevents the use of channels outside the specified frequency bands.

The product is used exclusively in a professionally installed, fixed point-to-point environment.