TRANZEO
EMC LABS INC

Operational Description

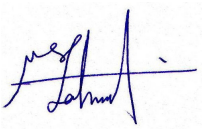
FCCID: QRF-NYYON23

2.4 GHz and 5.8 GHz Wireless Network Adapter
Tranzeo Wireless Technologies Inc.

Date: 23 March, 2007

Report No.: 230307.1

Labs: 19473 Fraser Way, Pitt Meadows, BC, Canada V3Y 2V4



Cam Finnigan
EMC Engineer

Sam Zahed
EMC Coordinator

A.1 Operational Description

The device is a wireless network bridge designed specifically for outdoor applications. The device provides a bridge between IEEE802.3 wired Ethernet LANs and IEEE802.11a/b/g compliant wireless networks. It uses an external antenna, or an internal antenna in case of the integrated units, coupled with an 802.11a/b/g transceiver to connect to remote wireless clients. The transceiver operates in the frequency bands 2400-2483.5 and 5725-5850 MHz. The device transmits digital network data. The unit is mounted externally in fixed point-to-point installations. It is mounted on the exterior of a building typically for broadband internet access.

The type of RF modulation is DSSS and OFDM. Both DSSS and OFDM are used at 2.4 GHz while at 5.8 GHz only OFDM is used. The device can transmit data at a bit rate of 11 Mbps in DSSS mode and 54 Mbps in OFDM mode or a real-world data rate of approximately 4 and 27 Mbps respectively. A 128 bits Wired Equivalent Privacy (WEP) algorithm is used for secure communications. The device's standard compliance ensures that it can communicate with any 802.11a/b/g network.

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.