Electronics & Telematics Laboratory

<u>Test report No:</u> 9112340871 Page 5 of 59 Pages Title: WiMax Transceiver

Model: WIN7023 FCC ID: WQEWIN7023

Environmental evaluation and exposure limit according to FCC CFR 47 part 1, §1.1307, §1.1310.

Limit for power density for general population/uncontrolled exposure is $1(mW/cm^2)$ or $10 (W/m^2)$.

The power density calculation $S = (Pt /4\pi r^2)$.

Where

Pt - The transmitted power (EIRP) (mW)

r - The distance from the unit. (cm)

The 1(mW/cm²) limit can be calculated from the above based on the following data:

Pt- the transmitted power whish is equal to the maximum EIRP = 62.1 dBm = 1621810 mW.

Minimum allowed distance r from the antenna were FCC RF exposure limit may not be exceeded = $SQRT(1621810/4\pi) > 3.6 \text{ m}$.

4.2 EUT configuration.

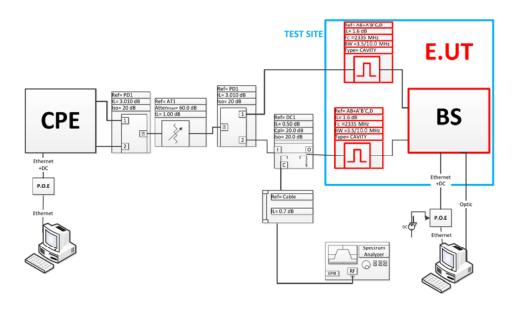


Fig. 1. The RuggedMax TM WIN7023 setup configuration.

1.3.3. Equipment Installation

Install the equipment in accordance with the electrical code relevant to the country of installation, such as the National Electrical Code (NEC), ANSI/NFPA 70; the Canadian Electrical Code (CEC), Part 1, CSA C22.1; and when applicable, the National Electrical Safety Code IEEE C2. Unless marked or otherwise identified, the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75, also applies.

1.3.4. Radio Frequency (RF) Exposure

The WiN7000 High Power Base Station is compliant with the requirements set forth in CFR 47, section 1.1307, addressing Radio Frequency (RF) exposure from radio frequency devices as defined in OET Bulletin 65. The emitted radiation should be as little as possible. To achieve minimum RF exposure, install the WiN7000 when it is configured not to transmit and set it to operational mode remotely, rather than enabling transmission by the installer on-site. For maintenance of the WiN7000, or other operations which require RF exposure, the exposure should be minimized in time and according to the regulations set by the FCC or the regulations relevant to the country of installation. Install antenna always at distance at least 3.6 m from the people and public area.

1.3.5. Lightning Protection



When the WiN7000 High Power Base Station is installed in an outdoor location, all indoor components (such as Ethernet and power supply) should be connected through a lightning protector.

Lightning protection protects people and equipment located indoors from lightning that might strike the WiN7000 High Power Base Station or its outdoor cables. Therefore, install the lightning protector device indoors, as close as possible to the point where the cables enter the building. The lightning protector can also be installed outdoors as long as the cables that lead indoors are well protected from lightning between the protector and the building entrance.

1.3.6. Power Cord Protection

Route all power supply cords so that people cannot walk on them or place objects on or against them. Walking on the cords or placing objects on or against the cords can damage the cords.