

Test report No: 9112346881

Page 5 of 56 Pages

Title: WiMax Transceiver

Model: WIN5123/WIN5223

FCC ID: VG5WIN5223

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/cm²) or 10 (W/m²).

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

Where

Pt - The transmitted power (EIRP) (mW)

r - The distance from the unit. (m)

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

Pt- the transmitted power which is equal to the maximum EIRP = 42.9 dBm = 16218 mW

Minimum allowed distance r from the antenna were FCC RF exposure limit may not be exceeded = $\text{SQRT}(16218/4\pi) > 0.39$ m.

4.2 EUT configuration.

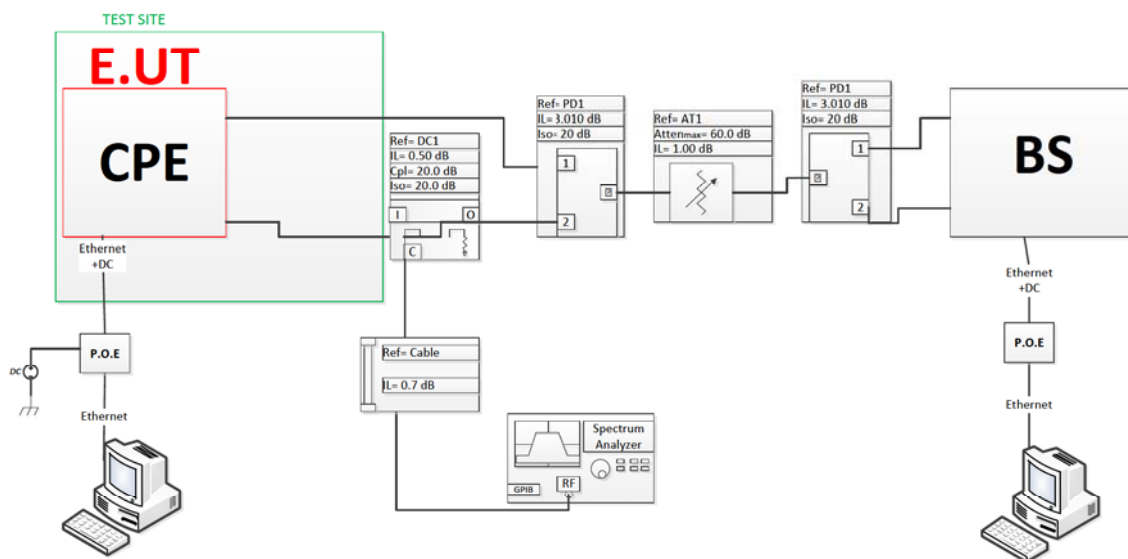


Fig. 1. The RuggedMax™ WIN5123 setup configuration.

1.3. Safety Information

1.3.1. RF Exposure

The WiN5100/WiN5200 CPE 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 CPE 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 CPE, 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 0.39 m from the people and public area.

1.3.2. Lightning Protection

When the ODU CPE is installed in an outdoor location, all indoor components (Ethernet connections and power supply) should be connected through a lightning protector. Lightning protection is intended to protect people and equipment located indoors from lightning that might strike the ODU CPE or its outdoor cables. The lightning protection device should be installed indoors, as close as possible to the point where the cables enter the building.

1.3.3. Power Cord Protection

The ODU CPE should always be connected to a supported Power over Ethernet (PoE) injector.



The WiN5100-series and WiN5200-series ODU CPEs are non-standard PoE devices. Do not attempt to use third-party PoE injectors. The use of any other type of connection or application of the ODU CPE and/or WiN1010 data adaptor is not permitted.

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

1.3.4. Servicing

Do not open the ODU CPE cover to perform corrective actions unless instructed to do so in the operating instructions.

1.3.5. Outdoor Grounding System



For the WiN5200, the antenna is an integral part of the CPE.

Verify that the antenna or cable system is grounded. The CPE antenna installation must be as per Article 810 of the NEC. Of particular note is the requirement that the grounding conductor be not less than 10 AWG (Cu). The grounding scheme should either be in accordance with UL 96 and 96A Lightning Protection Components and Installation Requirements for Lightning Protection Systems, or tested in accordance with UL 50 and UL 497.



To reduce the risk of fire, use only 26 AWG or larger telecommunication line cord between indoor and outdoor units.