

RF EXPOSURE EVALUATION

1. PRODUCT INFORMATION

Product Description	N53 Outdoor Radio Unit
Model Name	XCOMRU30N53O
FCC ID	2BOSVXCOMRU30N53O

2. EVALUATION METHOD AND LIMIT

FCC Requirement

According to FCC 1.1307(b), fixed RF source must comply with the following applicable limit for maximum permissible exposure (MPE) specified in FCC 1.1310:

Equipment Use	Frequency Range	Power Density [mW/cm ²]	Average Time [min]
General Population / Uncontrolled Exposure	1.5 – 100GHz	1	30
Occupational / Controlled Exposure	1.5 – 100GHz	5	30

3. ASSESSMENT RESULT

Frequency (MHz)	Maximum EIRP (dBm)	Maximum EIRP [mW]	Power Density (mW/cm ²)	Limit Power Density (mW/cm ²)
2483.5 MHz ~ 2495 MHz (NR Band n53) (Ant0+1+2+3)	33.74	2365.9196	0.0188	1

Note: 1) Maximum turn-up output power is 24 dBm per each port declared by the manufacturer.

2) The distance [cm] is calculated according to the Friis formula: $D = \sqrt{EIRP / (4\pi * S)}$,

Where S = power density in mW/cm²

EIRP = Effective Isotropic ally Radiated Power in mW

Antenna gain: 6dBi (Numeric gain: 3.98)

3) Only the worst case recorded.

4. CONCLUSION

The device complies with the FCC RF exposure requirements with RF safety distance of 100cm for General Population / Uncontrolled Exposure