

1 RF Exposure (FCC ID: JQ6-SECONNECT)

1.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f ²)*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz; *Plane-wave equivalent power density

1.2 MPE Calculation Formula

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

1.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

1.4 Antenna Gain

Chip Antenna

Antenna Gain: BLE:0.5dBi

2.4G: 1.0dBi

5G: 2.6dBi

2 Test Results

Mode	Max Power (dBm)	Max Power (mW)	Max Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
BLE	-0.74	0.843	0.5	20	0.000188	1
2.4GHz WLAN	14.37	27.35	1.0	20	0.006851	1
5GHz WLAN	13.75	23.71	2.6	20	0.008585	1

Conclusion:

The above results show that the device complies with the MPE requirement.