

Safety Human Exposure

1.1 Radio Frequency Exposure Compliance

1.1.1 Electromagnetic Fields

RESULT:

Pass

Test item	: FLEX 24V Stackpack Radio
Identification / Type No.	: FX5361-Z
FCC ID	: WDUFX5361
Test standard	: CFR47 FCC Part 2: Section 2.1093 CFR47 FCC Part 1: Section 1.1310 FCC KDB Publication 447498 D04 V01

➤ Product Classification

This device defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that the RF source's radiating structure(s) is/are at least 20 centimeters between the body of the user.

Max -0.68 dBi

➤ Radio Frequency Exposure Limit

For FCC:

According to FCC KDB # 447498 D04 V01, Clause Appendix B and 1.1307(b)(3)(i)(B)

The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);

a) EUT RF Exposure Evaluation standalone operations

FCC

Mode	Frequency [GHz]	*Measured RF Output Power [dBm]	Antenna Gain [dBi]	RF Output Power [mW]	EIRP [mW]	d [cm]	Limit- P_{th} [mW]
BR/EDR	2.402	1.80	-0.68	1.51	1.29	0.50	2.79

Note:

BR/EDR RF Output Power: Refer CN24GZY8 001

➤ **Conclusion**

The distance between antenna and human is larger than 0.5cm in the normal use.

Therefore, the maximum calculations result of above are meet the requirement of Radio Frequency Exposure limit.