


# FCC RF EXPOSURE REPORT

**FCC ID: 2A70H-EA-XRN-7B004**

Test Report No.....: RF240314002-03-006  
 Product(s) Name.....: Industrial touch all-in-one PC  
 Model(s).....: EA-XRN-7B004  
 Trade Mark.....: N/A  
 Applicant.....: Shenzhen Tengtek Technology Co., Ltd  
 Address.....: Room 1202, Building 160, East Lisongkuang Community, Gongming Street, Guangming District, Shenzhen, China 518106  
 Receipt Date.....: 2024.03.24  
 Test Date.....: 2024.03.26~2024.04.11  
 Issued Date.....: 2024.04.15  
 Standards.....: FCC Guidelines for Human Exposure IEEE C95.1  
 FCC Title 47 Part 2.1091  
 KDB 447498 D01 General RF Exposure Guidance v06  
 Testing Laboratory.....: Shenzhen Haiyun Standard Technical Co., Ltd.

Prepared By:	Checked By:	Approved By:	
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## 1.. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

### Table for Filed Antenna

For 2.4GHz\_WiFi:

Antenna gain	Antenna Type
1.09dBi	External Antenna

For 5GHz\_WiFi:

Antenna gain	Antenna Type
2.51dBi	External Antenna

For BDR+EDR/BLE:

Antenna gain	Antenna Type
1.09dBi	External Antenna

## 2.. TEST RESULTS

Worst case as below

Operating Mode	Freq.	Maximum conducted output power (dBm)	Directional Antenna Gain (dBi)	Calculated maximum EIRP		MPE Limit	MPE Value
	(MHz)			(dBm)	(mW)		
BDR+EDR	2402-2480	0.80	1.09	1.89	1.55	1	0.0003
BLE	2402-2480	2.64	1.09	3.73	2.36	1	0.0005
2.4G Wifi	2412-2462	14.39	1.09	15.48	35.32	1	0.007
5G Wifi	5180-5825	11.62	2.51	14.13	25.88	1	0.005

- Note: 1. The calculated distance is 20 cm.  
 2. The 2.4G Wifi function can not transmit at the same time with the 5G Wifi function  
 3. The Wifi function can not transmit at the same time with the BT function.

Result: Complies

## Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technology Co., Ltd. (hereinafter referred to as the unit).
2. The report is invalid without the signature of the approver.
3. The report is invalid if altered arbitrarily.
4. The report shall not be partially copied without the written approval of the unit.
5. The reported test results are only valid for the tested samples.
6. If there is any objection to the test report, it shall be submitted to the test unit within 15 days from the date of receiving the report, and the overdue shall not be accepted.

## Shenzhen Haiyun Standard Technology Co., Ltd.

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