

FCC RF EXPOSURE REPORT

FCC ID: 2AXXQHNR2306

Test Report No.....: RF250901013-01-005

Product(s) Name.....: Tri-Band AP Router

Model(s).....: HNR2306P, HNR2306A

Trade Mark.....: HUMAX Networks Inc.

Applicant.....: Humax Networks, INC

Address.....: 216, Hwangsaеul-ro, Bundang-gu, Seongnam-si, South Korea
13595

Receipt Date.....: 2025.09.26

Test Date.....: 2025.09.27~2025.10.27

Issued Date.....: 2025.11.03

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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History of this test report

Original Report Issue Date: 2025.11.03

- ☒ No additional attachment
- ☐ Additional attachments were issued following record

Attachment No.	Issue Date	Description

. 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	Antenna gain	Antenna Type
Ant1	4.30dBi	PCB Antenna
Ant2	3.83dBi	PCB Antenna

For 5GHz_WiFi:

Antenna	Antenna gain	Antenna Type
Ant1	4.51dBi	PCB Antenna
Ant2	5.28dBi	PCB Antenna
Ant3	3.10dBi	PCB Antenna
Ant4	4.99dBi	PCB Antenna

For 6E_WiFi:

Antenna	Antenna gain	Antenna Type
Ant1	5.01dBi	PCB Antenna
Ant2	5.54dBi	PCB Antenna
Ant3	3.59dBi	PCB Antenna
Ant4	5.15dBi	PCB Antenna

. TEST RESULTS

Worst case as below

Operating Mode	Freq.	Maximum conducted output power	Directional Antenna Gain	Calculated maximum EIRP		MPE Limit	MPE Value
	(MHz)	(dBm)	(dBi)	(dBm)	(mW)	(mW/cm ²)	
2.4G Wifi Ant1	2412-2462	23.06	4.30	27.36	544.503	1	0.069
2.4G Wifi Ant2	2412-2462	23.70	3.83	27.53	566.239	1	0.072
5G Wifi Ant1	5180-5825	24.15	4.51	28.66	734.514	1	0.094
5G Wifi Ant2	5180-5825	23.56	5.28	28.84	765.597	1	0.097
5G Wifi Ant3	5180-5825	23.96	3.10	27.06	508.159	1	0.065
5G Wifi Ant4	5180-5825	23.82	4.99	28.81	760.326	1	0.097
6E Wifi Ant1	5925-7125	21.22	5.01	26.23	419.7590	1	0.053
6E Wifi Ant2	5925-7125	20.94	5.54	26.48	444.6313	1	0.057
6E Wifi Ant3	5925-7125	21.03	3.59	24.62	289.7344	1	0.037
6E Wifi Ant4	5925-7125	21.10	5.15	26.25	421.6965	1	0.054

Note: 1. The calculated distance is 25cm.
2. Both of the 2.4G WIFI and 5G WIFI function can transmit simultaneously

The ratio= $MPE_{2.4G\ Wifi\ Ant1}/limit + MPE_{2.4G\ Wifi\ Ant2}/limit + MPE_{5G\ Wifi\ Ant1}/limit + MPE_{5G\ Wifi\ Ant2}/limit + MPE_{5G\ Wifi\ Ant3}/limit + MPE_{5G\ Wifi\ Ant4}/limit + MPE_{6E\ Wifi\ Ant1}/limit + MPE_{6E\ Wifi\ Ant2}/limit + MPE_{6E\ Wifi\ Ant3}/limit + MPE_{6E\ Wifi\ Ant4}/limit = 0.069/1 + 0.072/1 + 0.094/1 + 0.097/1 + 0.065/1 + 0.097/1 + 0.053/1 + 0.057/1 + 0.037/1 + 0.057/1 = 0.695 < 1.0$

As the sum of MPE ratios for all simultaneous transmitting antennas is ≤ 1.0 , simultaneous transmission MPE test exclusion will be applied.

Result: Complies

Statement

1. The report is invalid without the official seal or special seal of Shenzhen Haiyun Standard Technical 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 Technical Co., Ltd.

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(END OF REPORT)