



**TEST REPORT
EN IEC 62311:2020**

Report Reference No. : **HK2109153520-2EH**

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Date of issue : 2021/09/13

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Applicant's name : XonTel Technology Trd. Co. W.LL

Address : Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait

Test specification

Standard..... : **EN IEC 62311:2020**

TRF Originator : Shenzhen HUAK Testing Technology Co., Ltd.

Master TRF : Dated 2020-05

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Test item description : Wireless Access Point

Trade Mark..... : N/A

Model/Type reference : XT-1800AX

List Model(s)..... : N/A

Hardware Version..... : V2.0

Software Version..... : V2.0

Operation Frequency : From 2412MHz to 2472MHz

Ratings..... : DC 48V From POE power or DC 12V From DC Power

Result..... : **Pass**



TEST REPORT

Test Report No. :	HK2109153520-2EH	2021/09/13
		Date of issue

Equipment under Test : Wireless Access Point

Model/Type reference : XT-1800AX

List Model(s) : N/A

Applicant : XonTel Technology Trd. Co. W.LL

Address : Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait

Manufacturer : XonTel Technology Trd. Co. W.LL

Address : Kuwait City, Qibla, Aladel Tower, F21, state of Kuwait



**** Modified History ****

Revision	Description	Issued Data	Remark
Revision 1.0	Initial Test Report Release	2021/09/13	Jason Zhou

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by HUAK, this document cannot be reproduced except in full with our prior written permission. The more details and the authenticity of the report will be confirmed at <http://www.cer-mark.com>.

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GENERAL INFORMATION

1.1 GENERAL REMARKS

Date of receipt of test sample	:	2021/09/06
Testing commenced on	:	2021/09/06
Testing concluded on	:	2021/09/13

1.2 GENERAL DESCRIPTION OF EUT

Equipment	Wireless Access Point
Model Name.	XT-1800AX
Serial Model	N/A
Difference description	N/A
Product Description	The EUT is Wireless Access Point. 2.4G Wifi
	Operation Frequency: IEEE 802.11b/g/n20/ax20: 2412-2472MHz IEEE 802.11 n40/ax40: 2422-2462MHz
	Modulation Type: DSSS, OFDM
	Antenna Designation: Internal Antenna
	Antenna Gain(Peak) 3.0dBi
	5G 5150-5250:
	Operation Frequency: IEEE 802.11a:5180MHz-5240MHz IEEE 802.11n HT20/IEEE 802.11ac HT20/IEEE 802.11ax HT20:5180MHz-5240MHz IEEE 802.11n HT40/IEEE 802.11ac HT40/IEEE 802.11ax HT40:5190MHz-5230MHz IEEE 802.11ac HT80/IEEE 802.11ax HT80:5210MHz
	Modulation Type: IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT20: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT40: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT80: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HT20: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HT40: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HT80: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK)
	Antenna Designation: Internal Antenna
	Antenna Gain(Peak) 3.0dBi



	5745-5825
	Operation Frequency: IEEE 802.11a/ IEEE 802.11n HT20/802.11ac HT20/802.11ax HT20:5745MHz-5825MHz IEEE 802.11n HT40/ IEEE 802.11ac n HT40/802.11ax HT40:5755-5795MHz IEEE 802.11ac HT80/ 802.11axHT80:5775MHz
	Modulation Type: IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT20: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT40: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ac HT80: OFDM (256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HT20: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HT40: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK) IEEE 802.11ax HT80: OFDM (1024QAM, 256QAM, 64QAM, 16QAM, QPSK,BPSK)
	Antenna Designation: Internal Antenna
	Antenna Gain(Peak) 3.0dBi
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Channel List	Refer to below
Hardware Version	V2.0
Software Version	V2.0
Note:	For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



1.EN IEC 62311 REQUIREMENT

1.1 GENERAL INFORMATION

According to its specifications, the EUT must comply with the requirements of the following standards:

EN IEC 62311:2020[Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (0 Hz to 300 GHz)]

1.2 LIMIT

A. Typical usage, installation and the physical characteristics of equipment make it inherently compliant with the applicable EMF exposure levels such as those listed in the bibliography. This low-power equipment includes unintentional (or non-intentional) radiators, for example incandescent light bulbs and audio/visual (A/V) equipment, information technology equipment (ITE) and multimedia equipment (MME) that does not contain radio transmitters.

NOTE Equipment is described as A/V equipment, ITE or MME if its main use is playback/recording of music, voice or images, or processing of digital information.

B. The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion level defined in 4.2.

C. The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level defined in 4.2.

D. Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in 4.2.



3. RESULT

3.1 Summary of Results

Limit (W/ m ²)	Result (W/ m ²)	Verdict
10	0.096	passed

3.2 MPE Evaluation

$$S = PG / 4\pi R^2$$

P = Power input to antenna

G = Antenna Gain

R = distance to the center of radiation of antenna (in meter) = 0.2 m

$\pi=3.142$

The maximum power density at a distance of 0.2 m for EUT is shown as below:

Operation Mode	Max. EIRP (W)	R (m)	S (W/m ²)	Limit (W/m ²)	Conclusion
2.4G WIFI	0.048	0.2	0.096	10	PASS
5150-5250	0.019	0.2	0.038	10	PASS
5475-5825	0.013	0.2	0.026	10	PASS

3.3 Measurement Uncertainty

Extended Uncertainty (k=2) 95% 0.5dB

.....End of Report.....