



FCC TEST REPORT

FCC ID: 2AP9Y-XM1000S

Product	:	Wireless Video Transmission System with intercom
Model Name	:	XM1000S
Brand	:	FORHOPE
Report No.	:	PTC20120303601E-FC03
Prepared for		
Shenzhen Forhope Science Technology Co., Ltd.		
Rm 601, 6/F., Baojie'an Economic Trading Center, Xinhua and Labor Road Cross, Xixiang, Bao'an District, Shenzhen, China P.C. 518102		
Prepared by		
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TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Forhope Science Technology Co., Ltd.
Address : Rm 601, 6/F., Baojie'an Economic Trading Center, Xihu and Labor Road Cross, Xixiang, Bao'an District, Shenzhen, China P.C. 518102
Manufacture's name : Shenzhen Forhope Science Technology Co., Ltd.
Address : Rm 601, 6/F., Baojie'an Economic Trading Center, Xihu and Labor Road Cross, Xixiang, Bao'an District, Shenzhen, China P.C. 518102
Product name : Wireless Video Transmission System with intercom
Model name : XM1000S
Test procedure : KDB 447498 D01 General RF Exposure Guidance v06
Test Date : Dec 16, 2020 to Apr 12, 2021
Date of Issue : Apr 12, 2021
Test Result : Pass

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink that reads "Leo Yang".

Leo Yang / Engineer

Technical Manager:

A handwritten signature in black ink that reads "Chris Du".

Chris Du / Manager



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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		



3 General Information

3.1 General Description of E.U.T.

Product Name	:	Wireless Video Transmission System with intercom
Model Name	:	XM1000S
Additional model	:	N/A
Operation Frequency	:	5180MHz~5240MHz 5745MHz~5825MHz
Number of Channel	:	4 Channels for 802.11n(HT20) 5 Channels for 802.11n(HT20)
Type of Modulation	:	OFDM with BPSK/QPSK/16QAM/64QAM/256QAM
Antenna installation	:	Columnar antenna
Antenna Gain	:	5dBi
The directional gain	:	8.01 dBi
Power supply	:	Input:DC 12V 0.65A
Hardware Version	:	5800-HI3520-T0forTransmitter 5800-AMN001-R0 for Receiver
Software Version	:	XM1000_TX_FCC&IC for Transmitter XM1000_RX_FCC&IC for Receiver



4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density



4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (mw)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Result
WIFI A 5.1G	3.16	13.85	24.27	0.0153	1	Pass
WIFI B 5.1G	3.16	13.86	24.32	0.0153	1	Pass
A+B	6.32	17.04	50.58	0.0636	1	Pass
WIFI A 5.8G	3.16	13.25	21.13	0.0133	1	Pass
WIFI A 5.8G	3.16	13.00	19.95	0.0126	1	Pass
A+B	6.32	16.19	41.59	0.0523	1	Pass

*****THE END REPORT*****