



Maximum Permissible Exposure

FCC ID : 2AKWYXBP301
APPLICANT : Dynascan Technology Corp.
Application Type : Certification
Product : Digital Transmission System
Model No. : XBP301
Trademark : DynaScan
FCC Rule Part(s) : Part 2.1091 (Mobile)
Received Date : January 3, 2022
Test Date : January 4, 2022 ~ January 18, 2022

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(Peter Syu)
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Approved By : *Chenz Ker*
(Chenz Ker)



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report. Test results reported herein relate only to the item(s) tested.

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Revision History

Report No.	Version	Description	Issue Date
2201TW5401-U2	1.0	Original Report	2022-02-08

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	Digital Transmission System
Model No.	XBP301
Trademark	DynaScan
Supports Radios Spec.	WiFi 2.4G: 802.11b/g/n-20/n-40 (2TX / 2RX)
Modulation	802.11b: DSSS, DBPSK, DQPSK, CCK 802.11g/n: OFDM (BPSK, QPSK, 16QAM, 64QAM)

Note:

1. This case is to add Host (Product Name: Display, Model No.: 64907), so the FCC C2PC (Conducted Output Power, Spurious Emission & Band Edge, AC Conducted Emissions) is executed.

2. FCC Original Report Grant Date: 06/11/2020, FCC ID: 2AKWYXBP301.

1.2. Antenna Description

WiFi 2.4GHz	
Antenna Type	PIFA
Antenna M/N	RFMTA34071AIMAB301 RFMTA34071AIMAB302
Antenna Gain	RFMTA34071AIMAB301: 0.87dBi RFMTA34071AIMAB302: -0.29dBi

2. MAXIMUM PERMISSIBLE EXPOSURE (MPE)

2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	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 Exposures				
0.3-1.4	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

Note : (1) f= Frequency in MHz , (2) * = Plane-wave equivalent power density

Calculation Formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

r = distance between observation point and center of the radiator in cm

Under normal use condition, is at least 20cm away from the body of the user .

So, this device is classified as **Mobile Device**.

2.2. Test Result

Mode	Frequency (MHz)	Output Power to Antenna (dBm)	Output Power to Antenna (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
Wi-Fi	2412~2462	23.15	206.54	0.87	20	0.0502	1

So, device can comply with FCC radiation exposure requirement specified in the FCC Rule 2.1091.

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