

Federal Communications Commission  
Authorization and Evaluation Division  
Equipment Authorization Branch  
7435 Oakland Mills Road  
Columbia, MD 21046

## **Applicant's declaration concerning RF Radiation Exposure**

We hereby indicate that the product

Product description: Wireless Transmitter

Model No: TA-58, TA-XXXX (X=0~9,a~z,A~Z or Blank)

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the  
Product : Transmitter  
will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M22104-20820-C-54 and the accompanying calculations.

Company: MIPRO Electronics Co., Ltd.  
Address: 814, Beigang Rd., Chiayi City 600079, Taiwan

Date: 2021-05-21

MIPRO ELECTRONICS CO., LTD.



Solomon Chang



Registration number: W6M22104-20820-C-54  
FCC ID: M5X-TA58

### **3.6 Automatic Discontinuation of transmission, FCC 15.407 (c)**

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure.  
This function will be declared by manufacturer.

### **3.7 Reserved, FCC 15.407 (d)**

### **3.8 Indoor Operation Restriction, FCC 15.407 (e)**

Within the 5.15–5.25 GHz band, U- NII devices will be restricted to indoor operations to reduce any potential for harmful interference to co-channel MSS operations. This equipment has to be declared by manufacturer of the final product as content of the user manual.

### **3.9 Equivalent Isotropic Radiated Power (EIRP), FCC 15.407 (f)**

EIRP = max. conducted output power + antenna gain

EIRP = 10.33 dBm + 0 dBi [antenna gain claimed by manufacturer] = 10.33 dBm = 10.7895 mW

Test equipment used: ETSTW-RE 055



Registration number: W6M22104-20820-C-54  
FCC ID: M5X-TA58

### **3.10 Exemption Limits for Routine Evaluation according to 47 CFR FCC Part 2 Subpart J, section 2.1091**

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

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 20 cm normally can be maintained between the user and the device.

**(A) Limits for Occupational/Controlled Exposure**

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	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 (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz

\*Plane-wave equivalent power density

E = Electric field (V/m) P = output power (W) G = EUT Antenna numeric gain (numeric)

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

The formula can be changed to mW/m<sup>2</sup>.

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



## **Worldwide Testing Services(Taiwan) Co., Ltd.**

Registration number: W6M22104-20820-C-54

FCC ID: M5X-TA58

Established separation distance is 20 cm.

Operating frequency band: 5735-5839 MHz

The product meets RF exposure requirement.

Because the power density of  $0.0021 \text{ mW/cm}^2$  at 5839 MHz is below the power density limit of  $1 \text{ mW/cm}^2$ .

Limits:

<b>Limit for General Population / Uncontrolled Exposure</b>	
Frequency (MHz)	Power Density (mW/cm <sup>2</sup> )
1500 – 100.000	1.0