

RF Exposure Report

Report No.: SA180725E02

FCC ID: O6L-A7196FH

Test Model: A7196FH

Received Date: July 25, 2018

Test Date: Sep. 27, 2018

Issued Date: Oct. 09, 2018

Applicant: TRANWO TECHNOLOGY CORP.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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Taiwan R.O.C.

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan R.O.C.

**FCC Registration /
Designation Number:** 723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
SA180725E02	Original release.	Oct. 09, 2018

1 Certificate of Conformity

Product: 2.4GHz Digital Audio Video Module

Brand: TRANWO

Test Model: A7196FH

Sample Status: ENGINEERING SAMPLE

Applicant: TRANWO TECHNOLOGY CORP.

Test Date: Sep. 27, 2018

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Wendy Wu , **Date:** Oct. 09, 2018
Wendy Wu / Specialist

Approved by : May Chen , **Date:** Oct. 09, 2018
May Chen / Manager

2 RF Exposure

2.1 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)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	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

f = Frequency in MHz ; *Plane-wave equivalent power density

2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

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

2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

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

2.4 Antenna Gain

Antenna No.	Antenna Net Gain(dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable length (cm)
1	2.4	2.4~2.4835	Dipole	R-SMA	14
2	-0.8343	2.4~2.4835	Dipole	none	12
3	2.39	2.4~2.4835	Dipole	R-SMA	14
4	2.32	2.4~2.4835	Dipole	R-SMA	14
5	2.29	2.4~2.4835	Dipole	none	9
6	2.29	2.4~2.4835	Dipole	none	15.7

Note: Antenna No. 1 was selected as representative antenna for the test and its data was recorded in this report.

2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
GFSK	2468	51.286	2.4	20	0.01773	1

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