

## RF Exposure Report

**Report No.:** SA161124E06A

**FCC ID:** O6L-A7196

**Test Model:** A7196

**Received Date:** Nov. 24, 2016

**Test Date:** Dec. 08, 2016

**Issued Date:** Dec. 23, 2016

**Applicant:** TRANWO TECHNOLOGY CORP.

**Address:** No.236, Sec. 3, Huanbei Rd., Jubei City, Hsinchu County 30265, Taiwan

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

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

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### Release Control Record

Issue No.	Description	Date Issued
SA161124E06A	Original release.	Dec. 23, 2016

## 1 Certificate of Conformity

**Product:** 2.4GHz Digital Audio Video Module

**Brand:** TRANWO

**Test Model:** A7196

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** TRANWO TECHNOLOGY CORP.

**Test Date:** Dec. 08, 2016

**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 :**

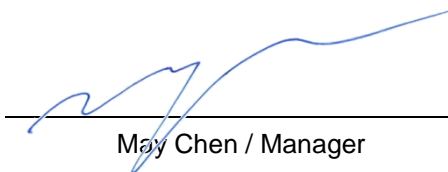


**Date:**

Dec. 23, 2016

Claire Kuan / Specialist

**Approved by :**



**Date:**

Dec. 23, 2016

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 <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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

The antennas provided to the EUT, please refer to the following table:

Antenna No.	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Antenna Connector
1	2	2.4~2.4835	Dipole	R-SMA
2	-0.8343	2.4~2.4835	Dipole	NA

Note:

- For Antenna 1 connector is R-SMA, RF cable and antenna is can be separated, RF cable is soldered to the modular.
- For Antenna 2 is no connector, RF cable is soldered to the modular.

## 2.5 Calculation Result

Frequency Band (MHz)	Max Power Avg. (dBm)	Max Power Avg. (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (W/m <sup>2</sup> )
2408~ 2468	18.00	63.096	2	20	0.01989	1

**NOTE:** 1. This power include tune-up tolerance range that specified in MP1 Tune Up power table

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