

# **RF Exposure Report**

Report No.: SA170203E03A

FCC ID: ZMYDWA0100

Test Model: DWA0100

Series Model: MOD000300

Received Date: Apr. 10, 2017

Test Date: Apr. 22, 2017

Issued Date: July 26, 2017

Applicant: MitraStar Technology Corporation

Address: No. 6, Innovation Rd II, Hsinchu Science Park, Hsinchu 30076, 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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Report No.: SA170203E03A Page No. 1 / 6 Report Format Version: 6.1.1 Reference No.: 170410E04



## **Table of Contents**

Relea	se Control Record	. 3
1	Certificate of Conformity	. 4
2	RF Exposure	. 5
2.1	Limits for Maximum Permissible Exposure (MPE)	. 5
	MPE Calculation Formula	
2.3	Classification	. 5
	Antenna Gain	
2.1	Calculation Result of Maximum Conducted Power	. 6



## **Release Control Record**

Issue No.	Description	Date Issued
SA170203E03A	Original release.	July 26, 2017

Page No. 3 / 6 Report Format Version: 6.1.1

Report No.: SA170203E03A Reference No.: 170410E04



## 1 Certificate of Conformity

Product: Media Access Gateway

Brand: technicolor

Test Model: DWA0100

Series Model: MOD000300

Sample Status: PROTOTYPE

Applicant: MitraStar Technology Corporation

Test Date: Apr. 22, 2017

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

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.

Wendy Wu / Specialist

**Approved by :** // , **Date:** July 26, 2017

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					
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

### 2.2 MPE Calculation Formula

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

where

Pd = power density in mW/cm<sup>2</sup>

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 30cm away from the body of the user. So, this device is classified as **Mobile Device**.

#### 2.4 Antenna Gain

Ant. No.	Antenna Gain (dBi)	Frequency range (GHz)	Antenna Type	Connecter Type
1	2.64	2.4~2.4835	PCB	NA
2	3.43	2.4~2.4835	PCB	NA



Report Format Version: 6.1.1

## 2.1 Calculation Result of Maximum Conducted Power

Frequency (MHz)	Max. Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	304.893	6.05	30	0.109	1

NOTE: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 6.05dBi$ 

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