

RF Exposure Report

Report No.: SA170830C13

FCC ID: M82-WISE1540

Test Model: WISE-1540

Received Date: Aug. 30, 2017

Test Date: Sep. 18 ~ Sep. 19, 2017

Issued Date: Oct. 11, 2017

Applicant: ADVANTECH CO., LTD

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

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Release Control Record

Issue No.	Description	Date Issued
SA170830C13	Original release	Oct. 11, 2017

1 Certificate of Conformity

Product: M2.COM Mesh Network IoT Node

Brand: ADVANTECH

Test Model: WISE-1540

Sample Status: Engineering sample

Applicant: ADVANTECH CO., LTD

Test Date: Sep. 18 ~ Sep. 19, 2017

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1

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 : Alice Ho , **Date:** Oct. 11, 2017
Alice Ho / Specialist

Approved by : Ken Liu , **Date:** Oct. 11, 2017
Ken Liu / Senior 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				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

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

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

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**.

3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2405 - 2475	7.32	5.03	20	0.00342	1

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