

RF Exposure Report

Report No.: SA170809C18

FCC ID: M82-WISE1530

Test Model: WISE-1530

Received Date: Aug. 09, 2017

Test Date: Aug. 27 ~ Sep. 28, 2017

Issued Date: Oct. 12, 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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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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Release Control Record

Issue No.	Description	Date Issued
SA170809C18	Original release.	Oct. 12, 2017

1 Certificate of Conformity

Product: WiFi/BLE IoT Node

Brand: ADVANTECH

Test Model: WISE-1530

Sample Status: Engineering sample

Applicant: ADVANTECH CO., LTD

Test Date: Aug. 27 ~ Sep. 28, 2017

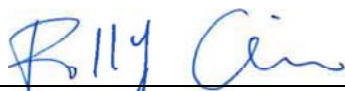
Standards: FCC Part 2 (Section 2.1091)

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 :



Polly Chien / Specialist

Date:

Oct. 12, 2017

Approved by :



Ken Liu / Senior Manager

Date:

Oct. 12, 2017

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

Function	Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WLAN	2412-2462	14.85	5.03	20	0.019	1
Bluetooth LE	2402-2480	4.34	5.03	20	0.002	1
Bluetooth EDR	2405-2480	4.56	5.03	20	0.002	1

*The WLAN 2.4GHz and Bluetooth technology can't transmit at same time.

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