

RF Exposure Evaluation Declaration

Product Name : M2M DATA MODULE

Model No. : IMA2, IMA2G

FCC ID : NKRIMA2

Applicant : Wistron NeWeb Corporation

Address : 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan, R.O.C

Date of Receipt : 2022/07/27

Date of Declaration : 2022/09/01

Report No. : 2270799R-RFUSMPEV02-A

Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

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Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.

Issued Date: 2022/09/01

Report No.: 2270799R-RFUSMPEV02-A



Product Name	M2M DATA MODULE	
Applicant	Wistron NeWeb Corporation	
Address	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan, R.O.C	
Manufacturer	Wistron NeWeb Corporation	
Model No.	IMA2, IMA2G	
FCC ID	NKRIMA2	
Trade Name	WNC	
Applicable Standard	KDB 447498 D01 v06	<input checked="" type="checkbox"/> Minimum test separation distance ≥ 20 cm <input type="checkbox"/> For low power devices
Test Result	Complied	

Documented By :



(Senior Project Specialist / Joanne Lin)

Tested By :



(Senior Engineer / Alan Chen)

Approved By :



(Manager / Tim Sung)

Revision History

Report No.	Version	Description	Issued Date
2270799R-RFUSMPEV02-A	V1.0	Initial issue of report.	2022/09/01

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	M2M DATA MODULE
Model No.	IMA2, IMA2G
Trade Name	WNC
FCC ID	NKRIMA2

Note: For more detailed information please refer to report No.: 2270799R-RFUSWWAV04-A.

1.2. Test Facility

USA : **FCC Registration Number: TW0033**

Canada : **CAB Identifier Number: TW3023 / Company Number: 26930**

Site Description : Accredited by TAF
Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd

Address : No. 5-22, Ruishukeng Linkou District, New Taipei City, 24451, Taiwan

Performed Location : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan,
R.O.C.

Phone number : +886-3-275-7255

Fax number : +866-3-327-8031

Email address : info.tw@dekra.com

Website : <http://www.dekra.com.tw>

2. RF Exposure Evaluation

2.1. Standard Applicable

According to KDB 447498 D01 (7.1), A minimum test separation distance ≥ 20 cm is required between the antenna and radiating structures of the device and nearby persons to apply mobile device exposure limits.

2.2. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

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)
(A) Limits for Occupational/ Control Exposures				
3.0-30	1842/f	4.89/f	900/f ²	6
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
1.34-30	824/f	2.19/f	180/f ²	30
300-1500	--	--	F/1500	30
1500-100,000	--	--	1	30

F= Frequency in MHz

Friis Formula

Friis transmission 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

Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤ 1.0

2.3. Test Result of RF Exposure Evaluation

Product : M2M DATA MODULE
Test Item : RF Exposure Evaluation

Band	Tune-up conducted output power (dBm)	Antenna Gain (dBi)	Max Antenna Gain to meet all limit (dBi)	E.I.R.P (dBm)	E.I.R.P (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	EIRP limit (dBm)
Cat-M1 Band 13	25.70	3.14	8.00	33.70	2344.23	0.466	0.518	36.92

Distance: 20cm

Note: The tune-up conducted output power is refer to the tune-up procedure provided by the customer.