



A D T

RF EXPOSURE REPORT

REPORT NO.: SA130328C30

MODEL NO.: M2M6270T

FCC ID: NKRM2M6270TDK

RECEIVED: Mar. 08, 2013

TESTED: Apr. 09, 2013

ISSUED: Apr. 23, 2013

APPLICANT: Wistron NeWeb Corporation

ADDRESS: 20 Park Avenue II, Hsinchu, Science Park,
Hsinchu 30076, Taiwan (R.O.C)

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

This report should not be used by the client to claim
product certification, approval, or endorsement by
TAF or any government agencies.



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.



A D T

TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. CERTIFICATION	4
2. RF EXPOSURE	5
2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)	5
2.2 MPE CALCULATION FORMULA	5
2.3 CLASSIFICATION	5
2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	6



A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130328C30	Original release	Apr. 23, 2013



A D T

1. CERTIFICATION

PRODUCT: M2M Development Kit

MODEL NO.: M2M6270T

BRAND: Wistron NeWeb Corporation

APPLICANT: Wistron NeWeb Corporation

TESTED: Apr. 09, 2013

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

IEEE C95.1

The above equipment (model: M2M6270T) 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 : Evonne Liu , **DATE :** Apr. 23, 2013

Evonne Liu / Specialist

APPROVED BY : Roy Wu , **DATE :** Apr. 23, 2013

Roy Wu / 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

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

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**.



A D T

2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Frequency BAND (MHz)	Operating Mode	Maximum Conducted (dBm)		Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm2)	Limit (mW/cm2)
		Burst Avg. power	Time Avg. power				
GSM 850	GPRS 12	30.66	27.66	0.6	688.30	0.13	0.55
GSM1900	GPRS 12	27.70	24.70	-0.1	287.72	0.06	1

Frequency band (MHz)	Conducted Avg. power (dBm)	Antenna Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm2)	Limit (mW/cm2)
2412~2462	15.52	2.8	67.92	0.014	1

2.5 Evaluation of Simultaneous transmission

There is one WWAN module and one WLAN module installed in EUT. According to KDB 616217 D03 4) a), the formula is as following and the calculation is listed in below table.

$(\sum \text{ of the highest MPE / MPE limit}) < 1$

Co-transmission Configuration	Highest WLAN MPE	MPE Limitation	Highest WWAN MPE	MPE Limitation	Sum of Ratio
WLAN + GSM 850	0.014	1.00	0.13	0.55	0.25
WLAN + GSM1900	0.014	1.00	0.06	1.00	0.07