



# RF EXPOSURE REPORT

**REPORT NO.:** SA130520E10

**MODEL NO.:** RU-865, RU-865-XXXX (X :0~9 , A~Z ,  
Configuration Code)

**FCC ID:** MAD-RU-865

**RECEIVED:** May 20, 2013

**TESTED:** May 28, 2013

**ISSUED:** June 05, 2013

**APPLICANT:** Microelectronics Technology Inc.

**ADDRESS:** 1, Innovation Road II, Hsinchu Science-based  
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**ISSUED BY :** Bureau Veritas Consumer Products Services  
(H.K.) Ltd., Taoyuan Branch Hsin Chu  
Laboratory

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130520E10	Original release	June 05, 2013



## 1.CERTIFICATION

**PRODUCT:** RFID Mini PCI-E Card Module  
**BRAND NAME:** MTI  
**MODEL NO.:** RU-865, RU-865-XXXX (X :0~9 , A~Z , Configuration Code)  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** Microelectronics Technology Inc.  
**TESTED:** May 28, 2013  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (Model: RU-865) 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 :** Phoenix Huang , **DATE:** June 05, 2013  
( Phoenix Huang, Specialist )

**APPROVED BY :** May Chen , **DATE:** June 05, 2013  
( May Chen, Manager )

## 2. RF EXPOSURE LIMIT

### 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)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 3. MPE CALCULATION FORMULA

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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

### 4. 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**.

## 5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
902.75 ~ 927.25	691.831	5.25	20	0.46103	1

Note: Limit of Power Density = F/1500

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