

# **RF EXPOSURE REPORT**

 REPORT NO.:
 SA120718C10A

 MODEL NO.:
 MC8355

 FCC ID:
 QYL320GOBI3

 ISSUED:
 Nov. 12, 2012

**APPLICANT:** Getac Technology Corporation

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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.	REASON FOR CHANGE	DATE ISSUED
SA120718C10A	Original release	Nov. 12, 2012



### **1. CERTIFICATION**

**PRODUCT:** WWAN Module MODEL NO.: MC8355 **BRAND:** Sierra **APPLICANT:** Getac Technology Corporation **TEST SAMPLE:** ENGINEERING SAMPLE **TESTED:** Sep. 11 ~ Sep. 13, 2012 STANDARDS: FCC Part 2 (Section 2.1091) FCC OET Bulletin 65, Supplement C (01-01) **IEEE C95.1** 

The above equipment (Model: MC8355) 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

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Rov Wu / Manager

APPROVED BY : \_\_\_\_\_\_, DATE : \_\_\_\_\_\_ Nov. 12, 2012



## 2. RF EXPOSURE

#### 2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

		POWER DENSITY (mW/cm <sup>2</sup> )	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

 $Pd = (Pout^*G) / (4^*pi^*r^2)$ 

where

 $Pd = power density in mW/cm^2$ 

Pout = output power to antenna in mW

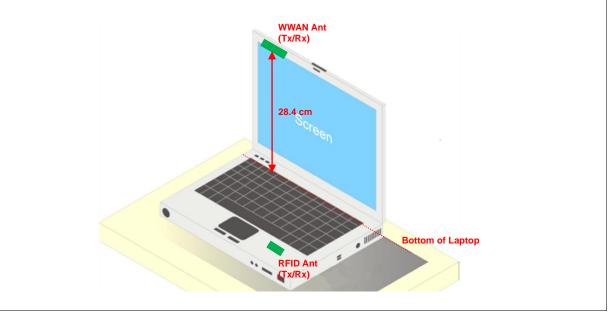
G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

#### 2.3 CLASSIFICATION

The WWAN 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**.





Function	Maximum Antenna Gain (dBi)	Maximum Antenna Gain (numeric)	Maximum Output Power (dBm)	Maximum Output Power (mW)	Time Averaged Power (mW)	Calculated RF Exposure at r = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm²)
GSM850 (GPRS 1 Uplink)	1.5	1.41	33.04	2013.72	251.72	0.07	0.55
GSM850 (GPRS 2 Uplink)	1.5	1.41	32.79	1901.08	475.27	0.13	0.55
GSM850 (EDGE 2 Uplink)	1.5	1.41	27.25	530.88	132.72	0.04	0.55
GSM1900 (GPRS 1 Uplink)	2.6	1.82	30.18	1042.32	130.29	0.05	1.00
GSM1900 (GPRS 2 Uplink)	2.6	1.82	30.79	1199.50	299.87	0.11	1.00
GSM1900 (EDGE 2 Uplink)	2.6	1.82	27.30	537.03	134.26	0.05	1.00

#### 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Function	Maximum Antenna Gain (dBi)	Maximum Antenna Gain (numeric)	Maximum Output Power (dBm)	Maximum Output Power (mW)	Calculated RF Exposure at r = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm²)
WCDMA II	2.6	1.82	24.68	293.76	0.11	1.00
WCDMA IV	1.0	1.26	24.58	287.08	0.07	1.00
WCDMA V	1.5	1.41	24.48	280.54	0.08	0.55
CDMA2000 BC0	1.5	1.41	24.62	289.73	0.08	0.55
CDMA2000 BC1	2.6	1.82	24.64	291.07	0.11	1.00

**Note:** The maximum output power is refer to the RF report of the WWAN module (FCC ID: J9CGOBI3000)

#### 2.5 EVALUATION OF SIMULTANEOUS TRANSMISSION

There is one WWAN module and one RFID module installed in this laptop PC, and the exposure condition is mobile and portable respectively. According to KDB 616217 D01, since the maximum power of RFID is less than 60/f and the separation distance between RFID antenna and WWAN antenna is larger than 5 cm, the simultaneous transmission SAR evaluation is not required.