

RF EXPOSURE REPORT

REPORT NO.: SA130624C02A

MODEL NO.: TP825Q

FCC ID: 2ABC7TP825Q

RECEIVED: Jun. 24, 2013

TESTED: Jul. 30, 2013 ~ Jan. 13, 2014

ISSUED: Jan. 13, 2014

APPLICANT: Touchcom Co., Ltd.

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Taiwan, R.O.C.

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 Tsuen, Kwei

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R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130624C02A	Original release	Jan. 13, 2014



1. CERTIFICATION

PRODUCT: Embedded Module

MODEL: TP825Q

BRAND: Touchcom

APPLICANT: Touchcom Co., Ltd.

TESTED: Jul. 30, 2013 ~ Jan. 13, 2014

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: TP825Q) 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.

, DATE: Jan. 13, 2014 Chien / Specialist

APPROVED BY **DATE:** Jan. 13, 2014

Anderson Chiu / Senior Engineer



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/cm²)	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/cm²

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 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**.



2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	ERP (dBm)	EIRP (dBm)	DISTANCE (cm)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
GSM 824.2 ~ 848.8MHz	28.70	30.85	20	0.242	0.549
GPRS 824.2 ~ 848.8MHz	28.50	30.65	20	0.231	0.549
EDGE 824.2 ~ 848.8MHz	28.05	30.20	20	0.208	0.549
WCDMA 826.4 ~ 846.6MHz	17.15	19.30	20	0.017	0.551

NOTE: EIRP = ERP + 2.15dBi.

FREQUENCY BAND (MHz)	EIRP (dBm)	DISTANCE (cm)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
GSM 1850.2 ~ 1909.8MHz	29.62	20	0.182	1
GPRS 1850.2 ~ 1909.8MHz	29.55	20	0.179	1
EDGE 1850.2 ~ 1909.8MHz	28.81	20	0.151	1
WCDMA 1852.4 ~ 1907.6MHz	20.72	20	0.023	1

NOTE: EIRP = ERP + 2.15dBi.

Mode	Frequency band (MHz)	Conducted power (dBm)	Antenna Gain (dBi)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
WiFi	2412~2462	19.93	5	0.0743	1
BT EDR	2402~2480	-0.03	5	0.0006	1
BT LE	2402~2480	1.56	5	0.0009	1