

RF EXPOSURE REPORT

REPORT NO.: SA120910C27
MODEL NO.: SMAC 5800
FCC ID: Q5A-SMAC-5800
RECEIVED: Sep. 10, 2013
TESTED: Sep. 10, 2012 ~ Apr. 16, 2013
ISSUED: May 08, 2013

APPLICANT: Sify Technologies Ltd

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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
SA120910C27	Original release	May 08, 2013

1. CERTIFICATION

PRODUCT: APX-58200-D
MODEL NO.: SMAC 5800
BRAND: Sify
APPLICANT: Sify Technologies Ltd
TESTED: Sep. 10, 2012 ~ Apr. 16, 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: SMAC 5800) 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 : Jemma Yang , **DATE** : May 08, 2013
Jemma Yang / Specialist

APPROVED BY : Ken Liu , **DATE** : May 08, 2013
Ken Liu / Senior 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

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

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

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

MODULATION MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
802.11n (20MHz)	22.38	9.01	20	0.2740	1

NOTE: Directional gain = 6dBi + 10log(2) = 9.01dBi