



# RF EXPOSURE REPORT

**REPORT NO.:** SA110317E04

**MODEL NO.:** MAX208M

**FCC ID:** I88MAX208M

**ACCORDING:** FCC Guidelines for Human Exposure  
IEEE C95.1

**APPLICANT:** ZyXEL Communications Corporation

**ADDRESS:** No. 6, Innovation Road II, Science-Park,  
Hsin-Chu, 300, Taiwan

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

**LAB ADDRESS:** No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung  
Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307,  
Taiwan



## RELEASE CONTROL RECORD

| ISSUE NO.        | REASON FOR CHANGE | DATE ISSUED   |
|------------------|-------------------|---------------|
| Original release | NA                | June 22, 2011 |

## 1. 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

## 2. 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

## 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 All user stations.

## 4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For channel bandwidth: 5MHz

| FREQUENCY BAND (MHz) | MAX POWER (mW) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/ cm <sup>2</sup> ) | LIMIT (mW/cm <sup>2</sup> ) |
|----------------------|----------------|--------------------|---------------|--------------------------------------|-----------------------------|
| 2498.5-2687.5        | 378.4          | 6                  | 20            | 0.300                                | 1.00                        |

For channel bandwidth: 10MHz

| FREQUENCY BAND (MHz) | MAX POWER (mW) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/ cm <sup>2</sup> ) | LIMIT (mW/cm <sup>2</sup> ) |
|----------------------|----------------|--------------------|---------------|--------------------------------------|-----------------------------|
| 2501-2685            | 371.5          | 6                  | 20            | 0.294                                | 1.00                        |