

# Maximum Permissible Exposure report

For

Xiamen Trust Information Tech Co.,Ltd.

Room 202, No.19, Wanghai Road, Xiamen, China

**FCC ID:2ADY9WI-200**

WI-200, WI-100, WI-300

This Report Concerns: Original Report	Equipment Type: Indoor Air Detector
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Report No.:	BSL20150112-2
Receive EUT	January 02, 2015 /
Date/Test Date:	January 02- January 12, 2015
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## **1.§ 15.247 (i) and §1.1307 (b) (1) – Maximum Permissible exposure (MPE)**

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### **1.1 Standard Applicable**

According to subpart 15.247 (i) and subpart 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

#### **Limits for General Population/Uncontrolled Exposure**

<b>Frequency Range (MHz)</b>	<b>Electric Field Strength (V/m)</b>	<b>Magnetic Field Strength (A/m)</b>	<b>Power Density (mW/cm<sup>2</sup>)</b>	<b>Averaging Time (minute)</b>
<b>Limits for General Population/Uncontrolled Exposure</b>				
0.3–3.0	614	1.63	*(100)	30
3.0–30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz

\* = Plane-wave equivalent power density

### **1.2 Test Data**

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

S: Power density, in mW/cm<sup>2</sup>

P: Power input to the antenna, in mW

G: numeric gain of the antenna

R: distance to the center of the antenna, in cm

## 802.11b Mode

Maximum peak output power at antenna input terminal (dBm):	<u>16.93</u>
Maximum peak output power at antenna input terminal (mW):	<u>49.32</u>
Prediction distance (cm):	<u>20</u>
Prediction frequency (MHz):	<u>2437</u>
Antenna Gain, typical (dBi):	<u>0</u>
Maximum Antenna Gain (numeric):	<u>1</u>
Power density at predication frequency and distance (mW/cm <sup>2</sup> ):	<u>0.0098</u>
MPE limit for Occupational exposure at predication frequency (mW/cm <sup>2</sup> ):	<u>1.0</u>

### 1.3 Test Result

The device is compliant with the requirement MPE limit of General Population/Uncontrolled Exposure at predication frequency 1.0 mW/cm<sup>2</sup> .And the precaution is outlined in the user's manual to prevent to high level of RF energy.