

# **FCC RF EXPOSURE REPORT**

**FCC ID: T58E1PR**

**Equipment : 300Mbps Wireless N Range Extender**  
**Model : E1+**  
**Applicant : NETIS SYSTEMS CO., LTD**  
**Address : 4F&5F R&D Building, Oriental Cyberport,**  
**High-Tech Industrial Park, Nanshan, Shenzhen,**  
**China.**  
**According: : 300Mbps Wireless N Range Extender**

**B T L I N C .**

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## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

### Table for Filed Antenna

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain(dBi) | Note  |
|------|-------|------------|--------------|-----------|-----------|-------|
| 1    | N/A   | N/A        | Internal     | N/A       | 2.0       | TX/RX |
| 2    | N/A   | N/A        | Internal     | N/A       | 2.0       | TX/RX |

## TEST RESULTS

|                |                                   |                    |      |
|----------------|-----------------------------------|--------------------|------|
| EUT :          | 300Mbps Wireless N Range Extender | Model Name :       | E1+  |
| Temperature :  | 26 °C                             | Relative Humidity: | 62 % |
| Test Voltage : | AC 120V/60Hz                      |                    |      |
| Test Mode :    | TX B MODE /CH01, CH06, CH11       |                    |      |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2                  | 1.5849                 | 19.46                   | 88.3080                | 0.02785803                              | 1  | Complies    |
| 2                  | 1.5849                 | 19.86                   | 96.8278                | 0.03054572                              | 1  | Complies    |
| 2                  | 1.5849                 | 19.33                   | 85.7038                | 0.02703649                              | 1  | Complies    |

|                |                                   |                    |      |
|----------------|-----------------------------------|--------------------|------|
| EUT :          | 300Mbps Wireless N Range Extender | Model Name :       | E1+  |
| Temperature :  | 26 °C                             | Relative Humidity: | 62 % |
| Test Voltage : | AC 120V/60Hz                      |                    |      |
| Test Mode :    | TX G MODE /CH01, CH06, CH11       |                    |      |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2                  | 1.5849                 | 25.41                   | 347.5362               | 0.10963529                              | 1  | Complies    |
| 2                  | 1.5849                 | 25.37                   | 344.3499               | 0.10863015                              | 1  | Complies    |
| 2                  | 1.5849                 | 24.94                   | 311.8890               | 0.09838987                              | 1  | Complies    |

|                |  |                    |      |
|----------------|--|--------------------|------|
| EUT :          | 300Mbps Wireless N Range Extender      | Model Name :       | E1+  |
| Temperature:   | 26 °C                                  | Relative Humidity: | 62 % |
| Test Voltage : | AC 120V/60Hz                           |                    |      |
| Test Mode :    | TX N-20M MODE_ Total /CH01, CH06, CH11 |                    |      |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2                  | 1.5849                 | 26.52                   | 448.7454               | 0.14156320                              | 1  | Complies    |
| 2                  | 1.5849                 | 26.63                   | 460.2566               | 0.14519457                              | 1  | Complies    |
| 2                  | 1.5849                 | 26.48                   | 444.6313               | 0.14026534                              | 1  | Complies    |

|                |  |                    |      |
|----------------|--|--------------------|------|
| EUT :          | 300Mbps Wireless N Range Extender      | Model Name :       | E1+  |
| Temperature:   | 26 °C                                  | Relative Humidity: | 62 % |
| Test Voltage : | AC 120V/60Hz                           |                    |      |
| Test Mode :    | TX N-40M MODE_ Total /CH03, CH06, CH09 |                    |      |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) (mW/cm <sup>2</sup> ) | Limit of Power Density (S) (mW/cm <sup>2</sup> ) | Test Result |
|--------------------|------------------------|-------------------------|------------------------|---|--|-------------|
| 2                  | 1.5849                 | 27.1                    | 512.8614               | 0.16178951                              | 1  | Complies    |
| 2                  | 1.5849                 | 26.94                   | 494.3107               | 0.15593743                              | 1  | Complies    |
| 2                  | 1.5849                 | 27                      | 501.1872               | 0.15810673                              | 1  | Complies    |

Note: the calculated distance is 20 cm.