



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

**FCC ID: T583GC101R**

**Project No. : 1104C004**  
**Equipment : 150Mbps Wireless-N 3G Broadband Router**  
**Model : 3G-C101**  
**Applicant : NETIS SYSTEMS CO.,LTD.**  
**Address : 9F,B Block,Tsinghua Information Park, High-tech  
Industrial Park,Nanshan,Shenzhen,China**  
**According: : FCC Guidelines for Human Exposure IEEE C95.1**

***Neutron Engineering Inc.***

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### MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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

Ant.	Brand name	Model Name	Antenna Type	Connector	Gain (dBi)
1	GEQI	G020-1002 8-A	Dipole Antenna	N/A	5.0

### TEST RESULTS

EUT:	150Mbps Wireless-N 3G broadband Router	Model Name :	3G-C101
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	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
<b>5</b>	<b>3.1623</b>	<b>21.1500</b>	<b>130.3167</b>	<b>0.08202578</b>	<b>1</b>	<b>Complies</b>
5	3.1623	20.8400	121.3389	0.07637485	1	Complies
5	3.1623	20.6100	115.0800	0.07243532	1	Complies



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EUT:	150Mbps Wireless-N 3G broadband Router	Model Name :	3G-C101
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	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
5	3.1623	23.52	224.9055	0.14156320	1	Complies
5	3.1623	23.96	248.8857	0.15665720	1	Complies
<b>5</b>	<b>3.1623</b>	<b>24.11</b>	<b>257.6321</b>	<b>0.16216248</b>	<b>1</b>	<b>Complies</b>

EUT:	150Mbps Wireless-N 3G broadband Router	Model Name :	3G-C101
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20MHz 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
<b>5</b>	<b>3.1623</b>	<b>22.44</b>	<b>175.3881</b>	<b>0.11039525</b>	<b>1</b>	<b>Complies</b>
5	3.1623	21.97	157.3983	0.09907187	1	Complies
5	3.1623	22.31	170.2159	0.10713969	1	Complies

EUT:	150Mbps Wireless-N 3G broadband Router	Model Name :	3G-C101
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40MHz MODE 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
<b>5</b>	<b>3.1623</b>	<b>22.11</b>	<b>162.5549</b>	<b>0.10231761</b>	<b>1</b>	<b>Complies</b>
5	3.1623	21.41	138.3566	0.08708641	1	Complies
5	3.1623	21.83	152.4053	0.09592910	1	Complies