

Amped Wireless
13089 Peyton Dr. #C307 Chino Hills California 91709 United States

Federal Communications Commission
Authorization and Evaluation Division
Equipment Authorization Branch
7435 Oakland Mills Road
Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product
Product description: High Power AC1200 Wi-Fi PCI-E Adapter
Model No: PCI20E

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the Product : High Power AC1200 Wi-Fi PCI-E Adapter will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

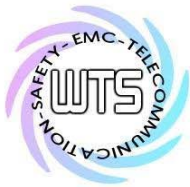
The appropriate information can be drawn from the test report no: W6M21401-13806-C-1 and the accompanying calculations.

Company: Amped Wireless
Address: 13089 Peyton Dr. #C307 Chino Hills California 91709 United States

Date: 2014/02/06

Signature

A handwritten signature in black ink, consisting of a stylized, cursive 'A' followed by a horizontal line extending to the right.



Registration number: W6M21401-13806-C-1

FCC ID: ZTT-PCI20E

3.2 Equivalent isotropic radiated power

FCC Rule: 15.247(b)(3)

EIRP = max. conducted output power + antenna gain

5.8GHz:802.11a

EIRP = 21.02 dBm + 7.01 dBi

= 28.03 dBm

5.8GHz:802.11n(20MHz), 802.11n(40MHz)

EIRP = 24.12 dBm + 7.01 dBi

= 31.13 dBm

5.8GHz:802.11ac

EIRP = 23.26 dBm + 7.01 dBi

= 30.27 dBm

2.4GHz:802.11b/g

EIRP = 23.28 dBm + 5.01 dBi

= 28.29 dBm

2.4GHz: 802.11n(20MHz), 802.11n(40MHz)

EIRP = 24.13 dBm + 5.01 dBi

= 29.14 dBm

Limit: EIRP = +36 dBm for Antenna gain <6dBi

Test equipment used: ETSTW-RE 055

3.3 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a “worst case” or conservative prediction.

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

S – Power Density

P – Output power ERP

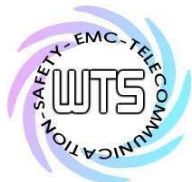
R – Distance

D – Cable Loss

AG – Antenna Gain

5.8GHz:802.11a

Item	Unit	Value	Remarks
P	mW	126.4736	Peak value
D	dB		
AG	dBi	7.01	
G		5.0234	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.1264	Calculated value



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21401-13806-C-1

FCC ID: ZTT-PCI20E

5.8GHz:802.11n(20MHz), 802.11n(40MHz)

Item	Unit	Value	Remarks
P	mW	258.2260	Peak value
D	dB		
AG	dBi	7.01	
G		5.0234	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.2581	Calculated value

5.8GHz:802.11ac

Item	Unit	Value	Remarks
P	mW	211.8361	Peak value
D	dB		
AG	dBi	7.01	
G		5.0234	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.2117	Calculated value

802.11b/g

Item	Unit	Value	Remarks
P	mW	212.8139	Peak value
D	dB		
AG	dBi	5.01	
G		3.1696	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.1342	Calculated value

2.4G:802.11n(20MHz), 802.11n(40MHz)

Item	Unit	Value	Remarks
P	mW	258.8213	Peak value
D	dB		
AG	dBi	5.01	
G		3.1696	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.1632	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure	
Frequency (MHz)	Power Density (mW/cm ²)
1500 – 100.000	1.0