

# FCC RF Exposure Report

**FCC ID** : XU8TEW820-821  
**Equipment** : Wireless AC Easy-Upgrader  
(Please refer to 1.1.1 for more details.)  
**Model No.** : TEW-820AP  
(Please refer to 1.1.1 for more details.)  
**Brand Name** : TRENDnet  
**Applicant** : TRENDnet, Inc.  
**Address** : 20675 Manhattan Place, Torrance, CA 90501,  
USA  
**Standard** : 47 CFR FCC Part 2.1091  
**Received Date** : Mar. 20, 2014  
**Tested Date** : Mar. 21 ~ Mar. 28, 2014

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:

  
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Gary Chang / Manager

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## Release Record

Report No.	Version	Description	Issued Date
FA432006	Rev. 01	Initial issue	May 20, 2014

# 1 General Description

## 1.1 Information

### 1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name
TRENDnet	TEW-820AP	Wireless AC Easy-Upgrader
	TEW-821AP	AC433 Wireless Access Point

✦ All models are electrically identical, different model names are for marketing purpose.  
✦ The above models, model **TEW-820AP** was selected as a representative one for the final test and only its data was recorded in this report.

## 2 MPE EVALUATION OF MOBILE DEVICES

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

### 2.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm <sup>2</sup> )	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

### 2.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * \pi * R^2}$$

Where

Pd= Power density in mW/cm<sup>2</sup>

Pt= EIRP in mW

π= 3.1416

R= Measurement distance

### 2.3 MPE EVALUATION RESULTS

Frequency Range (MHz)	Maximum Conducted Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
5180~5240	16.86	3	20	0.019	1
5745~5825	20.53	3	20	0.045	1

### 3 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

#### **Linkou**

Tel: 886-2-2601-1640

No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.

#### **Kwei Shan**

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

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