IEEE C95.1 2005 KDB 447498 D01 V06 47 C.F.R. Part 1, Subpart I, Section 1.1310 47 C.F.R. Part 2, Subpart J, Section 2.1091

RF EXPOSURE REPORT

For

Patient Information Display

Model: PID-1000S

Trade Name: Renown

Issued to

Renown Information Technology Corp. 15F., NO.207-3, SEC. 3, BEIXIN RD., XINDIAN DIST., NEW TAIPEI CITY 23143, TAIWAN (R.O.C)

Issued by

Compliance Certification Services Inc. Wugu Laboratory No.11, Wugong 6th Rd., Wugu Dist., New Taipei City 24891, Taiwan. (R.O.C.) Issued Date: May 15, 2018





Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	May 15, 2018	Initial Issue	ALL	Becca Chen
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1. TEST RESULT CERTIFICATION

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10: 2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules Part 15.207, 15.209, 15.247.

The test results of this report relate only to the tested sample EUT identified in this report.

APPLICABLE STANDARDS						
STANDARD TEST RESULT						
IEEE C95.1 2005 KDB 447498 D03 47 C.F.R. Part 1, Subpart I, Section 1.1310 47 C.F.R. Part 2, Subpart J, Section 2.1091	No non-compliance noted					

Approved by:

Hem Cleang

Sam Chuang Manager Compliance Certification Services Inc.

Tested by:

Becca cher

Becca Chen Report coordinator Compliance Certification Services Inc.

2. LIMIT

According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See § 1.1307(b)(1) of this chapter.

3. EUT SPECIFICATION

EUT	Patient Information Display						
Model	PID-1000S						
Trade Name	Renown						
Frequency band (Operating)	⊠ 802.11b/g/n HT20: 2412MHz ~ 2462MHz □ Others						
Device category	y Portable (<20cm separation) Mobile (>20cm separation) Others						
Exposure classification	 Occupational/Controlled exposure (S = 5mW/cm²) General Population/Uncontrolled exposure (S=1mW/cm²) 						
Antenna Specification	WIFI 2.4G -2.41 dBi (Numeric gain: 0.57) Type: PCB Antenna						
Max tune up Power	IEEE 802.11b mode16.50dBm(44.668mW)IEEE 802.11g mode15.50dBm(35.481mW)802.11n HT20 mode13.50dBm(22.387mW)						
Evaluation applied	 MPE Evaluation* SAR Evaluation N/A 						

4. TEST RESULTS

No non-compliance noted.

Calculation

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{377}$ Where E = Field strength in Volts / meter P = Power in Watts G = Numeric antenna gain d = Distance in meters S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{377d^2}$$

Changing to units of mW and cm, using:

P (mW) = P (W) / 1000 and d (cm) = d(m) / 100

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$
 Equation 1

Where d = Distance in cm P = Power in mW G = Numeric antenna gain S = Power density in mW / cm^2

5. MAXIMUM PERMISSIBLE EXPOSURE

Substituting the MPE safe distance using d = 20 cm into Equation 1:

 $S = 0.000199 \times P \times G$

Where P = Power in mW

G = Numeric antenna gain

 $S = Power density in mW / cm^2$

IEEE 802.11b mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm ²)
6	2437	44.668	0.57	20	0.0051	1.000

IEEE 802.11g mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm ²)
6	2437	35.481	0.57	20	0.0040	1.000

IEEE 802.11n HT20 mode:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm ²)
6	2437	22.387	0.57	20	0.0025	1.000