



# FCC TEST REPORT

## FCC ID: 2AOEA-EVC300

Product	:	Control Module
Model Name	:	EVC300
Additional model	:	N/A
Brand	:	EcoNet Controls Inc.
Report No.	:	PTC20062305601E-FC03
<b>Prepared for</b>		
EcoNet Controls Inc.		
1100 Sutton Dr., Unit 3 Burlington, Ontario Canada		
<b>Prepared by</b>		
Precise Testing & Certification Co., Ltd		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China		



Report No.: PTC20062305601E-FC03

## TEST RESULT CERTIFICATION

Applicant's name : EcoNet Controls Inc.  
Address : 1100 Sutton Dr., Unit 3 Burlington, Ontario Canada  
Manufacture's name : NIE-TECH CO., LTD.  
Address : Room 101 No.2 Four Road, Ludipu Industrial, Humen Town, Dongguan city, China  
Product name : Control Module  
Model name : EVC300  
Test procedure : N/A  
Test Date : Jun. 24, 2020 to Jun 30, 2020  
Date of Issue : Jun 30, 2020  
Test Result : Pass

This device described above has been tested by PTS, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of PTS, this document may be altered or revised by PTS, personal only, and shall be noted in the revision of the document.

Test Engineer:

A handwritten signature in black ink that reads "Leo Yang" with a stylized flourish at the end.

Leo Yang / Engineer

Technical Manager:

A handwritten signature in black ink that appears to read "Chris Du" with a stylized flourish.

Chris Du / Manager



## Contents

	<b>Page</b>
<b>2 TEST SUMMARY.....</b>	<b>4</b>
<b>3 GENERAL INFORMATION.....</b>	<b>5</b>
3.1 GENERAL DESCRIPTION OF E.U.T.....	5
<b>4 RF EXPOSURE.....</b>	<b>6</b>
4.1 REQUIREMENTS.....	6
4.2 THE PROCEDURES / LIMIT.....	6
4.3 MPE CALCULATION METHOD.....	7
4.4 TEST RESULT.....	7



## 2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		



### 3 General Information

#### 3.1 General Description of E.U.T.

Product Name	:	Control Module
Model Name	:	EVC300
Additional model	:	N/A
Model Description	:	N/A
Bluetooth Version	:	N/A
Operating frequency	:	802.11b/g/n HT20: 2412-2462MHz 802.11n HT40: 2422-2452MHz
Max. RF output power	:	WiFi: 11.52dBm
Type of Modulation	:	WiFi: CCK, OFDM
Antenna installation:	:	WiFi:PCB antenna
Antenna Gain:	:	3dbi
Power supply	:	DC12V, 1A



## 4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

### 4.1 Requirements

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 limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### 4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; \*Plane-wave equivalent power density



#### 4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

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

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

#### 4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density (mW/cm <sup>2</sup> )	Result
WIFI	3	2.00	11.52	14.19	0.0056	Pass

\*\*\*\*\*THE END REPORT\*\*\*\*\*