

EU-TYPE EXAMINATION (MODULE B) CERTIFICATE

Radio Equipment Directive (RED) 2014/53/EU

PHOENIX TESTLAB
Notified Body Number **0700**



This is to certify that:
PHOENIX TESTLAB did undertake the relevant type examination procedures for the radio equipment identified below which was found to be in compliance with the essential requirements of Radio Equipment Directive (RED) 2014/53/EU subject to any conditions in the annex attached hereto.

Certificate No.	17-213695
Manufacturer	ALTENERGY POWER SYSTEM INC.
Address	No.1 Yatai Road, Jiaxing 314050, Zhejiang Province P.R.China
Product Description	Energy Communication Unit; with WiFi and ZigBee
Brand Name / Model Name	APsystems / ECU-R

The radio equipment meets the following essential requirements

Article 3.1 a): Health and Safety	Conform
Article 3.1 b): Electromagnetic Compatibility	Conform
Article 3.2: Effective and Efficient Use of Radio Spectrum	Conform
Additional Essential Requirements:	Not applicable

Date of issue	2017-11-09	Expiry date:	2022-11-08
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This certificate remains valid unless cancelled or revoked, provided the conditions in the attached annex are complied with. The conditions for the validity of this certificate are listed in the Annex.

The attached Annex forms part of this certificate. This certificate consists of 3 pages.



Signed by Alan Lane
Notified Body

Annex

Technical description

Frequency Range	2.4G WiFi (20 MHz): 2412 - 2472 MHz ZigBee: 2405 - 2480MHz
Transmit Power	WiFi: 18.2 dBm EIRP ZigBee: 11.2 dBm EIRP
Hardware Version	V1.0.2
Software Version	ECU_R_1_0

System Components

Zigbee Antenna	External Antenna, 2dBi
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Optional Components

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Approval documentation

External / Internal Photos	provided, 3 pages / 5 pages
User Manual	provided, 30 pages
Block Diagram	provided, 1 page
Circuit Diagram	provided, 11 pages / 8 pages / 1 page
Operational Description	Operational Description, 1 page
PCB Layout	provided, 4 pages / 4 pages
Parts Placement	provided, 2 pages / 1 page / 3 pages
Parts List	provided, 2 pages / 1 page / 1 page
EU Declaration of Conformity	1 page, October 26, 2017
Explanation of compliance Article 10(2) and Article 10(10)	Description in the User Manual
Further Documents	Risk Assessment, 2 pages, October 26, 2017 Package, provided, 1 page



Applied Standards and Test Reports


Specification	Laboratory	Test Report Number / Version
EN 60950-1:2006+A11:2009+ A1:2010+A12:2011+A2:2013	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.	SET2017-12785
EN 62311:2008	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.	SET2017-14650 Rev.1.0
Draft ETSI EN 301 489-1 V2.2.0 Draft ETSI EN 301 489-17 V3.2.0	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.	SET2017-13854
ETSI EN 300 328 V2.1.1	CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.	SET2017-14665 Rev.1.0 SET2017-13470 Rev.1.0

Limitations / Restrictions

Operating Temperature range is -20 ~ 65 degree Celsius

Body Separation distance is 20cm by using the procedure of MPE calculation.

Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/them being placed on the market.
3. The manufacturer shall take all measures necessary so that the manufacturing process and its monitoring ensure conformity of the manufactured radio equipment with the approved type described in the EU-type examination certificate and with the requirements of Directive 2014/53/EU that apply to it.
4.  The manufacturer shall affix the CE marking to each item of radio equipment that is in conformity with the type described in the EU-type examination certificate and satisfies the applicable requirements of the Directive.
5. The manufacturer shall draw up a written EU declaration of conformity for each radio equipment type and keep it at the disposal of the national authorities for 10 years after the radio equipment has been placed on the market. The EU declaration of conformity shall identify the radio equipment type for which it has been drawn up. A copy of the EU declaration of conformity shall be made available to the relevant authorities upon request.

