

Intertek

Certificado de Producto Nuevo de Conformidad con Norma Oficial Mexicana

Certificado No: **16061NOM-001C00036**

Intertek Testing Services de México, S. A. de C. V., autoriza el uso de la marca de certificación NOM-ETL para los productos descritos en este certificado de acuerdo con las condiciones expuestas en el Contrato de Prestación de Servicios de Certificación y de conformidad con la Norma Oficial Mexicana. Este documento es propio de los servicios de certificación de Intertek y no es transferible. La certificación y el uso de la marca sólo pueden ser usados por el titular de este certificado. Intertek otorga el presente certificado con verificación mediante pruebas periódicas a:

Titular: **CALENTADORES SOLARES DE MÉXICO SA DE CV**
Dirección: **CALLE AGUA MARINA 3032, COL. AGUA BLANCA SUR, ZAPOPAN, JALISCO, CP 45235**
Norma: **NOM-001-SCFI-1993**

Fabricado y/o importado por: **CALENTADORES SOLARES DE MÉXICO SA DE CV**

Nombre del Producto: **INVERSOR PARA REDES FOTOVOLTAICAS (PHOTOVOLTAIC GRID-CONNECTED INVERTER)**

Marca: **APSYSTEMS «**

Modelo(s): **YC500A, YC500I, YC500A-NA-MX, YC500I-NA-MX «**

País(es) de Origen: **CHINA «**

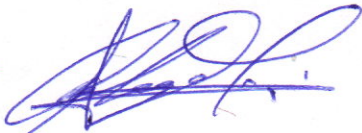
Laboratorio de Pruebas: **INTERTEK TESTING SERVICES DE MÉXICO SA DE CV**

Número de Informe de Resultados de Laboratorio: **1088694MEX-004**

Numero de Acreditación del Laboratorio: **EE-174-0018/12**

**Intertek**

Atentamente


Alberto Ortega Hernández
Supervisor**26/01/2016**
Fecha de Emisión**25/01/2017**
Fecha de Vencimiento

Este Certificado es para el uso exclusivo del Cliente de Intertek y es emitido según el Contrato de Prestación de Servicios de Certificación firmado entre Intertek y su Cliente. La responsabilidad de Intertek está limitada a los términos y condiciones del Contrato. Intertek no asume obligación con ninguna parte, diferente del Cliente de acuerdo con el Contrato de Prestación de Servicios de Certificación, por ninguna pérdida, gasto o daño ocasionado por el uso de este Certificado. Sólo el Cliente es autorizado para copiar o distribuir este Certificado. El uso de la marca de la Certificación de Intertek es restringido al plano de condiciones del Contrato y de este Certificado. Además el uso del nombre de Intertek para la venta o el anuncio de los productos certificados o el servicio deben ser aprobados previamente por escrito por Intertek.

Este documento reemplaza a todos los certificados anteriores relacionados con el número de informe de resultados de laboratorio aquí declarado.

No. de Acreditación 61/12 Vigente a partir de: 06/03/2012

Referencia No: **16ETL00004**

Intertek Testing Services de México, S. A. de C. V.
Poniente 134, No. 660, Col. Industrial Vallejo, C. P. 02300, México, D. F.

MEX-32 (13/05/2013)

C E R T I F I C A T E
of Conformity



Registration No.: AK 50336567 0001

Report No.: 15094345 001

Holder: **Altenergy Power System Inc.**
No.1Yatai Road
Jiaxing, Zhejiang Province 314050
P.R. China

Product: PV-Inverter
(Grid-connected Microinverter)

Identification: Type Designation : YC500A YC500I
Serial Number : Engineering Samples
Firmware Version : T24
Remark : Refer to test report 15094345 001
for details.

Tested acc. to: ABNT NBR 16149:2013
ABNT NBR 16150:2013
ABNT NBR IEC 62116:2012
ANEXO III - parte 2, Portaria n.º 357, de 01 de agosto de 2014

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body



Date 06.04.2016

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CERTIFICATE OF CONFORMITY

LOW VOLTAGE DIRECTIVE 2014/35/EU

KONFORMITÄTSBESCHEINIGUNG

CERTIFICATION NO.
ZERTIFIKATSNUMMER

S3M21507-0034-31810
CERTIFICATE HOLDER
ZERTIFIKATSINHABER

Altenergy Power System Inc.
No. 1 Yatai Road, Jiaxing, 314050 Zhejiang Province
P.R. China
TYPE OF EQUIPMENT
GERÄTEART

Photovoltaic 3-phase grid-connected Microinverter
BRAND NAME
MARKE

APsystems
MODEL NAME
GERÄTETYP

YC1000-3

This Certificate of Conformity is to certify that the tested sample(s) is (are) presumed to be in conformity with the safety objectives referred to in Article 3 and set out in Annex I or parts thereof, covered by those harmonised standards or parts thereof according to the Council Directive 2014/35/EU.

Mit dieser Konformitätsbescheinigung wird bestätigt, dass für das (die) getestete(n) Prüfmuster eine Konformität mit den Sicherheitszielen nach Artikel 3 und Anhang I oder Teilen davon vermutet wird, abgedeckt von den betreffenden harmonisierten Norm(en) oder Teilen davon, gemäß der Richtlinie 2014/35/EU des Rates.

Assessment of conformity was based on the following standard(s): / Die Bewertung der Konformität basiert auf folgende Norm(en):

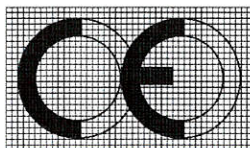
SPECIFICATION / ISSUE / DATE
SPEZIFIKATION / AUSGABE / DATUM

EN 62109-2:2011
EN 62109-1:2010
REPORT NUMBER
BERICHTSNUMMER

EFSH15060101-IE-02-L01, EFSH15060101-IE-02-L01-A1
NOTES:

The certificate is valid at the time of issue and only refers to the condition of the equipment at that time. The assessment by the Certification Body is based on the principles of the DIN EN ISO/IEC 17065:2013. The certificate is only granted on the condition that the owner continues to meet all Eurofins procedure, test and certification regulations as well as the General Terms of Business of Eurofins Product Service GmbH.

Das Zertifikat ist zum Zeitpunkt der Ausstellung gültig und bezieht sich nur auf die Situation des Gerätes zu diesem Zeitpunkt. Die Bewertung durch die Zertifizierstelle erfolgt nach den Prinzipien der DIN EN ISO/IEC 17065:2013. Dieses Zertifikat wird unter der Bedingung erteilt, dass der Inhaber die Anforderungen des Verfahrens, die Prüf- und Zertifizierungsordnung sowie die Allgemeinen Geschäftsbedingungen der Eurofins Product Service GmbH einhält.



Where compliance of electrical equipment with the safety objectives referred to in Article 3 and set out in Annex I has been demonstrated by the conformity assessment procedure, manufacturers shall draw up an EU declaration of conformity and affix the CE marking. (Chapter 2, Article 6, Clause 2 - Obligations of manufacturers)

Wurde mit dem Konformitätsbewertungsverfahren nachgewiesen, dass ein elektrisches Betriebsmittel den Sicherheitszielen nach Artikel 3 und Anhang I entspricht, stellen die Hersteller eine EU - Konformitätserklärung aus und bringen die CE - Kennzeichnung an. (Kapitel 2, Artikel 6, Absatz 2 – Pflichten des Herstellers)

Notified Body RED / R&TTE - EU • Notified Body MD - EU • NCB - IECEE CB Scheme • GS Body - ZLS (GS-Mark) • E-Mark
eurofins-Bauart geprüft • TCB - FCC USA • FCB - ISED Canada • BQTF - Bluetooth® • International Type Approval Service


Date: 2016-06-22
Valid until: 2019-06-21
Certifier: Adelheid Kutzker

Signature:

Title: Certification Manager

C E R T I F I C A T E

of Conformity



Registration No.: AK 50362136 0001

Report No.: 15094346 001

Holder: **Altenergy Power System Inc.**
No.1Yatai Road
Jiaxing, Zhejiang Province 314050
P.R. China

Product: PV-Inverter
(Grid-connected Microinverter)

Identification: Type Designation : YC500A-127 YC500I-127
Serial Number : Engineering Samples
Firmware Version : REV.5
Remark : Refer to test report 15094346 001
for details.

Tested acc. to: ABNT NBR 16149:2013
ABNT NBR 16150:2013
ABNT NBR IEC 62116:2012
ANEXO III - parte 2, Portaria n.º 357, de 01 de agosto de 2014

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body



Date 25.10.2016

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

C E R T I F I C A T E

of Conformity



Registration No.: AK 50359552 0001

Report No.: 15100654 001

Holder: **Altenergy Power System Inc.**
No.1Yatai Road
Jiaxing, Zhejiang Province 314050
P.R. China

Product: PV-Inverter
(Photovoltaic 3-Phase Grid-connected Microinverter)

Identification: Type Designation : YC1000-3-220
Serial Number : Engineering Samples
Firmware Version : T10
Remark : Refer to test report 15100654 001
for details.

Tested acc. to: ABNT NBR 16149:2013
ABNT NBR 16150:2013
ABNT NBR IEC 62116:2012
ANEXO III - parte 2, Portaria n.º 357, de 01 de agosto de 2014

The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Date 28.09.2016

Certification Body


Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

TCB**GRANT OF EQUIPMENT
AUTHORIZATION****TCB****Certification****Issued Under the Authority of the
Federal Communications Commission****By:****PHOENIX TESTLAB GmbH
Koenigswinkel 10
32825 Blomberg,
Germany****Date of Grant: 09/02/2015****Application Dated: 09/02/2015****Altenergy Power System Inc.
No.1, Yatai Road, Jiaxing Zhejiang
314050 P.R. China
Jiaxing,
China****Attention: Kevin Lu , engineer****NOT TRANSFERABLE**

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,
and is VALID ONLY for the equipment identified hereon for use under the
Commission's Rules and Regulations listed below.

FCC IDENTIFIER: 2AFGR-APS2530P
Name of Grantee: Altenergy Power System Inc.
Equipment Class: Digital Transmission System
Notes: ZigBee Module
Modular Type: Single Modular

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	15C	2405.0 - 2480.0	0.0048		

Output power listed is peak conducted. This OEM module is approved for use in products operating as mobile or fixed transmitting device. The only antenna approved for use with this module is those documented in the filing, and must be installed in the manner specified therein. This device and its antenna(s) must operate with a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Grantee shall provide installation and operating instructions for satisfying RF exposure requirements to OEM integrators and installers. This grant is valid only when the device is sold to OEM integrators and the OEM integrators are instructed to ensure that the end user has no manual instructions to remove or install the device.

TCB**GRANT OF EQUIPMENT
AUTHORIZATION****TCB****Certification****Issued Under the Authority of the
Federal Communications Commission****By:****PHOENIX TESTLAB GmbH
Koenigswinkel 10
32825 Blomberg,
Germany****Date of Grant: 09/02/2015****Application Dated: 09/02/2015****Altenergy Power System Inc.
No.1, Yatai Road, Jiaxing Zhejiang
314050 P.R. China
Jiaxing,
China****Attention: Kevin Lu , engineer****NOT TRANSFERABLE**

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE,
and is VALID ONLY for the equipment identified hereon for use under the
Commission's Rules and Regulations listed below.

FCC IDENTIFIER: 2AFGR-APS2530S
Name of Grantee: Altenergy Power System Inc.
Equipment Class: Digital Transmission System
Notes: ZigBee Module
Modular Type: Single Modular

<u>Grant Notes</u>	<u>FCC Rule Parts</u>	<u>Frequency Range (MHZ)</u>	<u>Output Watts</u>	<u>Frequency Tolerance</u>	<u>Emission Designator</u>
	15C	2405.0 - 2480.0	0.0048		

Output power listed is peak conducted. This OEM module is approved for use in products operating as mobile or fixed transmitting device. The only antenna approved for use with this module is those documented in the filing, and must be installed in the manner specified therein. This device and its antenna(s) must operate with a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Grantee shall provide installation and operating instructions for satisfying RF exposure requirements to OEM integrators and installers. This grant is valid only when the device is sold to OEM integrators and the OEM integrators are instructed to ensure that the end user has no manual instructions to remove or install the device.

TECHNICAL APPROVAL CERTIFICATE

based on the Agreement on Mutual Recognition
between the European Community and Canada

CERTIFICAT D'APPROBATION TECHNIQUE

en se basant l'accord de reconnaissance mutuelle
entre la Communauté Européenne et le Canada

CERTIFICATE NUMBER

NUMÉRO DE CERTIFICAT

15-210578

CERTIFICATION NUMBER

NUMÉRO DE CERTIFICATION

IC: 20481-APS2530P

TYPE OF SERVICE

TYPE DE SERVICE

New Single Certification (Modular Approval)

CERTIFICATE HOLDER

TITULAIRE DU CERTIFICAT

Altenergy Power System Inc.

No.1, Yatai Road, Jiaxing Zhejiang 314050

P.R. China

TYPE OF EQUIPMENT

GENRE DE MATÉRIEL

Zigbee Module

MODEL NUMBER

NUMÉRO DE MODELE

APS2530P

FREQUENCY RANGE

BANDÉ DE FRÉQUENCES

2405-2480 MHz

EMISSION DESIGNATION (TRC-43)

DÉSIGNATION D'ÉMISSION (CRT-43)

1M63G1D

R.F. POWER RATING (WATT)

PUISSANCE NOMINALE H.F (WATT)

0.0048W

ANTENNA INFORMATION

INFORMATION D'ANTENNE

PCB Antenna, Gain: 0.8 dBi

CONTACT INFORMATION OF TESTING LABORATORY

COORDONNÉES DU LABORATOIRE D'ESSAI

CCIC-SET

Electronic Testing Building, Shahe Road, Xili Town,

Nanshan District, Shenzhen Shenzhen, China

CERTIFIED TO

CERTIFIÉ SELON LE

SPECIFICATION / ISSUE

CAHIER DES CHARGES / ÉDITION

RSS-247 Issue 1, RSS-GEN Issue 4,

RSS-102 Issue 5

Certification of equipment means only that the equipment has met the requirements of the above-noted specification. Licence applications, where applicable to use certified equipment, are acted on accordingly by the Industry Canada issuing office and will depend on the existing radio environment, service and location of operation. This certificate is issued on condition that the holder complies and will continue to comply with the requirements and procedures issued by Industry Canada. The equipment for which this certificate is issued shall not be manufactured, imported, distributed, leased, offered for sale or sold unless the equipment complies with the applicable technical specifications and procedures issued by Industry Canada.

La certification du matériel signifie seulement que le matériel a satisfait aux exigences de la norme indiquée ci-dessus. Les demandes de licences nécessaires pour l'utilisation du matériel certifié sont traitées en conséquence par le bureau de délivrance d'Industrie Canada et dépendent des conditions radio ambiantes, du service et de l'emplacement d'exploitation. Le présent certificat est délivré à la condition que le titulaire satisfasse et continue de satisfaire aux exigences et aux procédures d'Industrie Canada. Le matériel à l'égard duquel le présent certificat est délivré ne doit pas être fabriqué, importé, distribué, loué, mis en vente ou vendu à moins d'être conforme aux procédures et aux spécifications techniques applicables publiées par Industrie Canada.

Labelling of Certified Radio Equipment: Equipment that has received certification but is not labelled with the model number and the certification number as outlined above is not considered certified.

Étiquetage du matériel radio homologué: Le matériel pour lequel une certification a été obtenue mais qui n'est pas étiqueté conformément aux exigences ci-dessus (numéro de modèle et numéro de certification) n'est pas considéré comme certifié.

I hereby attest that the subject equipment was tested and found in compliance with the above-noted specification.

J'atteste, par la présente, que le matériel a fait l'objet d'essai et a été jugé conforme à la spécification ci-dessus.

Certification Body Code: DE0003

recognised by



Bundesnetzagentur



Signed by / Signataire Alan Lane

Blomberg, 09 September 2015

Foreign Certification Body (FCB)

BNetzA-CAB-04/22-53

TECHNICAL APPROVAL CERTIFICATE

based on the Agreement on Mutual Recognition
between the European Community and Canada

CERTIFICAT D'APPROBATION TECHNIQUE

en se basant l'accord de reconnaissance mutuelle
entre la Communauté Européenne et le Canada

CERTIFICATE NUMBER

15-210579

NUMÉRO DE CERTIFICAT

CERTIFICATION NUMBER

IC: 20481-APS2530S

NUMÉRO DE CERTIFICATION

TYPE OF SERVICE

New Single Certification (Modular Approval)

TYPE DE SERVICE

CERTIFICATE HOLDER

Altenergy Power System Inc.

TITULAIRE DU CERTIFICAT

No.1, Yatai Road, Jiaxing Zhejiang 314050

P.R. China

TYPE OF EQUIPMENT

Zigbee Module

GENRE DE MATÉRIEL

MODEL NUMBER

APS2530S

NUMÉRO DE MODÈLE

FREQUENCY RANGE

2405-2480 MHz

BANDÉ DE FRÉQUENCES

EMISSION DESIGNATION (TRC-43)

1M63G1D

DÉSIGNATION D'ÉMISSION (CRT-43)

R.F. POWER RATING (WATT)

0.0048W

PUISSANCE NOMINALE H.F (WATT)

ANTENNA INFORMATION

Ipex connector with Whip Antenna, Gain: 2 dBi

INFORMATION D'ANTENNE

CONTACT INFORMATION OF TESTING LABORATORY

CCIC-SET

COORDONNÉES DU LABORATOIRE D'ESSAI

Electronic Testing Building, Shahe Road, Xili Town,
Nanshan District, Shenzhen Shenzhen, China

CERTIFIED TO
CERTIFIÉ SELON LE

SPECIFICATION / ISSUE
CAHIER DES CHARGES / ÉDITION

RSS-247 Issue 1, RSS-GEN Issue 4,
RSS-102 Issue 5

Certification of equipment means only that the equipment has met the requirements of the above-noted specification. Licence applications, where applicable to use certified equipment, are acted on accordingly by the Industry Canada issuing office and will depend on the existing radio environment, service and location of operation. This certificate is issued on condition that the holder complies and will continue to comply with the requirements and procedures issued by Industry Canada. The equipment for which this certificate is issued shall not be manufactured, imported, distributed, leased, offered for sale or sold unless the equipment complies with the applicable technical specifications and procedures issued by Industry Canada.

La certification du matériel signifie seulement que le matériel a satisfait aux exigences de la norme indiquée ci-dessus. Les demandes de licences nécessaires pour l'utilisation du matériel certifié sont traitées en conséquence par le bureau de délivrance d'Industrie Canada et dépendent des conditions radio ambiantes, du service et de l'emplacement d'exploitation. Le présent certificat est délivré à la condition que le titulaire satisfasse et continue de satisfaire aux exigences et aux procédures d'Industrie Canada. Le matériel à l'égard duquel le présent certificat est délivré ne doit pas être fabriqué, importé, distribué, loué, mis en vente ou vendu à moins d'être conforme aux procédures et aux spécifications techniques applicables publiées par Industrie Canada.

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Signed by / Signataire Alan Lane

Blomberg, 09 September 2015

Foreign Certification Body (FCB)

BNetzA-CAB-04/22-53