

Morningstar Corporation
Bill Mellema
Director of Engineering
8 Pheasant Run
Newtown 18940
USA

Date : 16.02.2016
Our ref. : DJW ZJ
Your ref.: 154122641

Ref : CB Certificate Japan

Type of Equipment : TS-MPPT Charge Controller
Model Designation : See Certificate
Certificate No. : JPTUV-069515
Report No. : 15092912 001

Dear Bill Mellema,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Best C.C. Chen

CC: Morningstar Corporation

Enclosure

TÜV RHEINLAND TAIWAN LTD.

11F., No. 758, Sec. 4, Bade Rd.,
Songshan Dist., Taipei City 105,
Taiwan R. O. C.
Tel. (02) 2172-7000
Fax (02) 2528-0018
<http://www.tuv.com>

TAICHUNG BRANCH:
No. 9, Lane 36, Sec. 3, Minsheng Rd.,
Daya Dist., Taichung City 428
Taiwan, R. O. C.
Tel. (04) 2560-2998
Fax (04) 2566-3598

IEC**IECEE**
CB
SCHEME

Ref. Certif. No.

JPTUV-069515

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST
CERTIFICATES FOR ELECTRICAL EQUIPMENT
(IECEE) CB SCHEMESYSTEME CEI D'ACCEPTATION MUTUELLE DE
CERTIFICATS D ESSAIS DES EQUIPEMENTS
ELECTRIQUES (IECEE) METHODE OC**CB TEST CERTIFICATE****CERTIFICAT D'ESSAI OC**Product
Produit

TS-MPPT Charge Controller

Name and address of the applicant
Nom et adresse du demandeurMorningstar Corporation
8 Pheasant Run
Newtown 18940, USAName and address of the manufacturer
Nom et adresse du fabricantMorningstar Corporation
8 Pheasant Run
Newtown 18940, USAName and address of the factory
Nom et adresse de l'usineOrient Semiconductor Electronics, Ltd.
16 East 3Rd St. N.E.P.Z.
Kaohsiung, Taiwan 81170 TaiwanRatings and principal characteristics
Valeurs nominales et caractéristiques principalesSolar input: 150Vd.c. max; 1) 30A, 2) 45A, 3) 60A; Class I
Battery : 8-72Vd.c.; 1) 30A, 2) 45A, 3) 60ATrademark (if any)
Marque de fabrique (si elle existe)

MORNINGSTAR

Type of Manufacturer's Testing Laboratories used
Type de programme du laboratoire d'essais constructeur

N/A

Model / Type Ref.
Ref. de type1) TS-MPPT-30 2) TS-MPPT-45
3) TS-MPPT-60Additional information (if necessary may also be
reported on page 2)
Les informations complémentaires (si nécessaire,
peuvent être indiqués sur la 2^{ème} page)

For model differences, refer to the test report.

A sample of the product was tested and found
to be in conformity with
Un échantillon de ce produit a été essayé et a été
considéré conforme à laIEC 62109-1:2010
EN 62109-1:2010As shown in the Test Report Ref. No. which forms part
of this Certificate
Comme indiqué dans le Rapport d'essais numéro de
référence qui constitue partie de ce Certificat

15092912 001

This CB Test Certificate is issued by the National Certification Body
Ce Certificat d'essai OC est établi par l'Organisme National de CertificationTÜV Rheinland Japan Ltd.
Global Technology Assessment Center
4-25-2 Kita-Yamata, Tsuzuki-ku
Yokohama 224-0021 Japan
Phone + 81 45 914-3888
Fax + 81 45 914-3354
Mail: info@jpn.tuv.com
Web: www.tuv.com

Date: 16.02.2016

Signature:

Best C.C. Chen