

ASU-PTL Photovoltaic Module Qualification

Type Test Certificate C1-GGE06003 is awarded to

Manufacturer: Guofei Green Energy Source Co, Ltd.

Type: GFM175M

Models: GFM180M, GFM175M, GFM170M, GFM165M, GFM160M, GFM155M, GFM150M

Specifications: 72 monocrystalline silicon cells from CEEG, QC Solar j-box (QC0506-1) and connectors, EVA encapsulant, TPT backsheet, tempered glass superstrate, and anodized aluminum frame. Maximum system voltage is 1000 V. (See photos on the back.)

Tested type: GFM175M Sampling: Three manufacturer-supplied unconditioned test samples

Test samples received: 11/15/06

Tests conducted from: 11/16/06

To: 1/30/07

Tests conducted at: PTL, 7349 E. Unity Avenue, Mesa, Arizona, 85212

Web: www.poly.asu.edu/ptl

This laboratory is accredited by the American Association for Laboratory Accreditation (A2LA).

Manufacturer's Address: Wuxi Guofei Green Energy Source Co, Ltd., Zhenfa 7 Road, Shuofang Industrial Park, Wuxi 214142, P.R. China

Test data and analysis detailed in Test Reports: [R-GGE06003](#)

PTL Project: [GGE06003](#)

Original Certificate Issue Date: [March 6, 2007](#)



Certificate #0921-01
Since 6/23/97

The **Arizona State University Photovoltaic Testing Laboratory (ASU-PTL)** acknowledges that the above photovoltaic test samples have satisfied the requirements of the following test standard(s):

1. IEC 61215: Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval [2005-04].

The GFM175M qualified by similarity to the GFM220M (project GGE06001) based upon IEC Retest Guidelines [12/30/04].

Models listed above qualified based upon IEC Retest Guidelines [12/30/04] and IEC/TC82/WG2 Type and Model Conventions [4/16/02].

All tests in the above listed test standard(s) are within the ASU-PTL's scope of accreditation. Exception(s): None

Deviations from, additions to, or exclusions from aforementioned test standard(s): None

This test certificate may be used by the manufacturing company for its own purposes. However, the ASU-PTL cannot accept any legal responsibility from such use. If the tested type undergoes any future product or process modifications, limited re-testing is required to maintain valid certification according to the applicable Retest Guidelines.

Dr. Govindasamy Tamizh-Mani, Director
Certifying Authority

Joseph M. Kuitche, Operations Manager
Certifying Witness

Bo Li, Test Manager
Certifying Witness

ASU-PTL Photovoltaic Module Qualification

Type Test Certificate C1-GGE06001 is awarded to

Manufacturer: Guofei Green Energy Source Co, Ltd.

Type: GFM220M

Models: GFM230M, GFM220M, GFM210M, GFM200M

Specifications: 60 monocrystalline silicon cells from CEEG, QC Solar j-box (QC0506-1) and connectors, EVA encapsulant, TPT backsheet, tempered glass superstrate, and anodized aluminum frame. Maximum system voltage is 1000 V. (See photos on the back.)

Tested type: GFM220M Sampling: Nine manufacturer-supplied unconditioned test samples

Test samples received: 11/15/06

Tests conducted from: 11/16/06

To: 2/7/07

Tests conducted at: PTL, 7349 E. Unity Avenue, Mesa, Arizona, 85212

Web: www.poly.asu.edu/ptl

This laboratory is accredited by the American Association for Laboratory Accreditation (A2LA).



Certificate #0921-01
Since 6/23/97

Manufacturer's Address: Wuxi Guofei Green Energy Source Co, Ltd., Zhenfa 7 Road, Shuofang Industrial Park, Wuxi 214142, P.R. China

Test data and analysis detailed in Test Reports: [R-GGE06001](#)

PTL Project: [GGE06001](#)

Original Certificate Issue Date: [March 6, 2007](#)

The **Arizona State University Photovoltaic Testing Laboratory (ASU-PTL)** acknowledges that the above photovoltaic test samples have satisfied the requirements of the following test standard(s):

1. IEC 61215: Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval [2005-04].

Models listed above qualified based upon IEC Retest Guidelines [12/30/04] and IEC/TC82/WG2 Type and Model Conventions [4/16/02].

All tests in the above listed test standard(s) are within the ASU-PTL's scope of accreditation. Exception(s): None

Deviations from, additions to, or exclusions from aforementioned test standard(s): None

This test certificate may be used by the manufacturing company for its own purposes. However, the ASU-PTL cannot accept any legal responsibility from such use. If the tested type undergoes any future product or process modifications, limited re-testing is required to maintain valid certification according to the applicable Retest Guidelines.

Dr. Govindasamy Tamizh-Mani, Director
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Joseph M. Kuitche, Operations Manager
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