

# ASU-PTL Photovoltaic Module Qualification

Test Certificate C2-SWI06001 is awarded to

**Manufacturer: SolarWorld Industries America**

**Type: SW175 mono/P**

**Models: SW175 mono/P, SW165 mono/P, SW155 mono/P, SW145 mono/P**

**Specifications:** 72 monocrystalline silicon cells, ProCharger junction box, EVA encapsulant, Tedlar/Polyester/Tedlar backsheet, tempered glass superstrate, and anodized aluminum frame. Maximum system voltage is 600 V (used for IEC61215 tests).

Tested type: Shell SQ175-P-B1 Sampling: Eight manufacturer-supplied unconditioned test samples

Test samples received: 6/3/04

Tests conducted from: 6/3/04 To: 9/21/04

Tests conducted at: PTL, 7349 E. Unity Avenue, Mesa, Arizona, 85212 Web: [www.poly.asu.edu/ptl](http://www.poly.asu.edu/ptl)

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

Manufacturer's Address: Shell Solar Industries, 4650 Adohr Lane, Camarillo, CA 93012, USA

Test data and analysis detailed in Test Report #: 04092101 PTL Projects: SSI04003, SSI05011, SSI05015, SWI06001

Original Certificate Issue Date: September 21, 2004 Rev. 1 Date: July 1, 2005 Rev. 2 Date: July 19, 2005

Revision 1: Type name is changed from Shell SQ175-P to Shell PowerMax Ultra 175-P. Model names are also changed. Certificate 05070101 replaces certificate 04092101.

Revision 2: 155 and 145 watt models were added based upon test results from project SSI05011. Certificate 05071901 replaces certificate 05070101.

Revision 3: Type and Model names are converted from Shell to SolarWorld designations. Certificate C2-SWI06001 replaces certificate 05071901.



Certificate #0921-01  
Since 6/23/97

Rev. 3 Date: July 21, 2006

The **Arizona State University Photovoltaic Testing Laboratory (ASU-PTL)** acknowledges that the above photovoltaic modules have been subjected to and passed the minimum requirements defined in test standard(s):

**1. IEC 61215: Design qualification and type approval for crystalline silicon terrestrial photovoltaic (PV) modules [1993-04].**

The qualified Type, the SQ175-P, includes both the -A1 (project SSI04001) and -B1 (project SSI04003) versions.

Models listed above qualified based upon IEC/TC82/WG2 Retest Guidelines [5/17/00] 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 design 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

William Shisler, Quality Manager  
Certifying Witness

Todd Arends, Test Manager  
Certifying Witness