IEC 61853-1 and IEC 61853-2 Standards: Validation of Models using Outdoor Test Methods

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IEC 61853 Scope

IEC 61853: Photovoltaic module performance testing and energy rating

Part 1 (2011)

Power rating at: AM = 1.5; $AOI = 0^{\circ}$; 7 irradiance levels; 4 temperature levels

Part 2 (2012)

Power rating adjustments to: AM = any; AOI = any

Part 3 (ongoing)

Energy rating calculation

Part 4 (ongoing)

Reference weather conditions





Presentation Scope

Part 1 (2011)

853

61

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Validation of referenced (IEC 60891) I-V translation and NREL models using outdoor test data

Solar ABCs report
March 2011

Part 2 (2012)

Validation of IEC and Sandia AOI models using outdoor test data

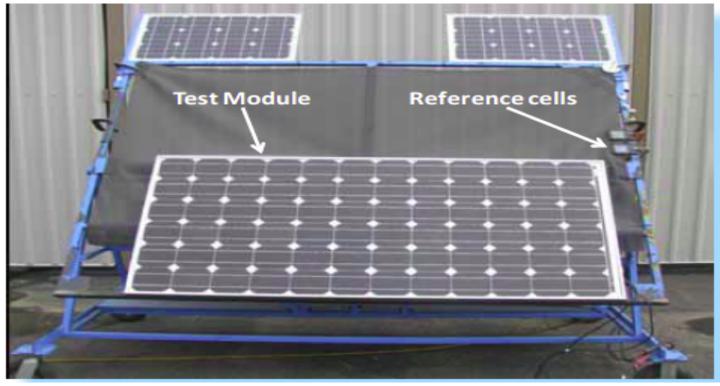
Solar ABCs Report

Next Few Weeks





Part 1: Outdoor Test Method



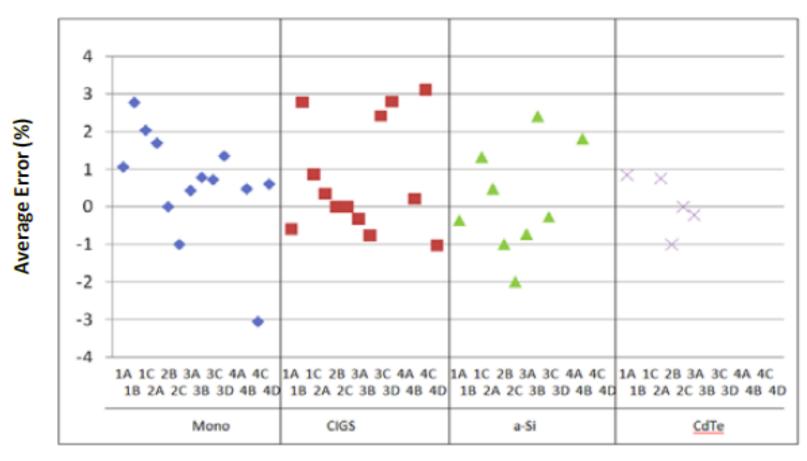






Part 1: Model Validation

A: Within 1% of target irradiance; B: 400-1000 W/m²; C: 100-400 W/m² (very sensitive range); D: 600-1000 W/m²

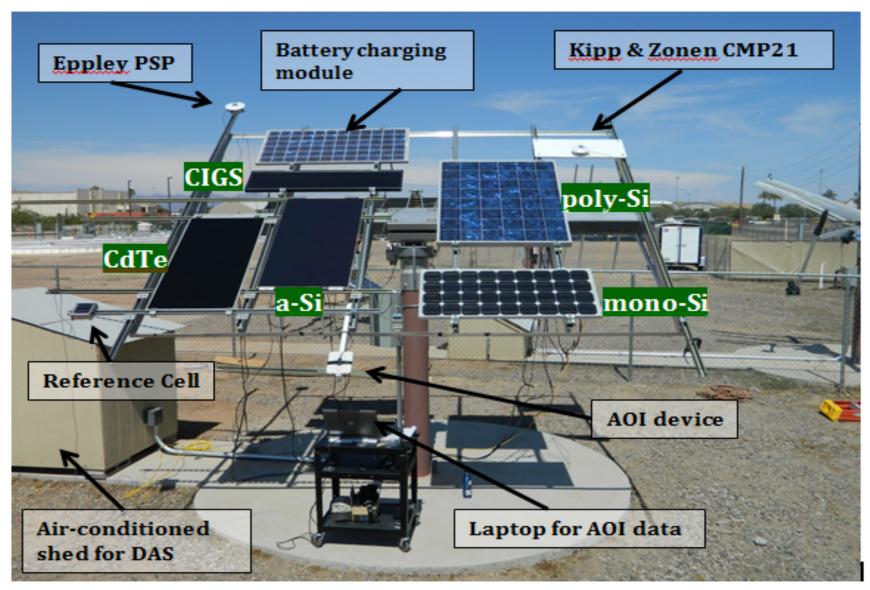


Procedure





Part 2: Outdoor Test Method







Part 2: Model Validation

