



International Electrotechnical Commission
Technical Committee 82 on Photovoltaics

PV Standards.

What IEC TC82 is Doing for You

By George Kelly, TC82 Secretary
solarexpert13@gmail.com
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TC 82 Working Groups

WG1: Glossary

Task: To prepare a glossary of terms relevant to PV.

WG2: Modules, non-concentrating

Task: To develop international standards for non-concentrating, terrestrial photovoltaic modules - crystalline & thin-film.

WG3: Systems

Task: To give general instructions for photovoltaic system design and maintenance.

WG6: Balance-of-system components

Task: To develop international standards for BOS components for PV systems.

WG 7: Concentrator modules

Task: To develop international standards for photovoltaic concentrators and receivers.

WG 8: Solar cells and wafers (new group to be formed in 2013)

Task: To develop international standards for photovoltaic cells and wafers.

JWG 21/TC 82 Batteries

Task: To draw up standard requirements for battery storage systems intended for use in photovoltaic systems.

JWG 1-TC 82/TC 88/TC21/SC21A

Task: To prepare guidelines for Decentralized Rural Electrification (DRE) projects which are now being implemented in developing countries.

TC 82 Standards

Standards published by TC 82 can be found on at this link:
http://www.iec.ch/dyn/www/f?p=103:23:0::::FSP_ORG_ID,FSP_LANG_ID:1276,25

Or go to www.iec.ch and search for TC 82 dashboard.

Select [IEC - TC 82 Dashboard > Scope](#) and click on Projects/Publications. The TC 82 Work Program will be listed. Click on [Publications](#) to view all standards that have been published to date.

The following pages list some of the New Work Item Proposals and projects for improvement of existing standards that are presently underway. Figures in **red** indicate expected publication dates.

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WG1 and WG2

Working Group 1

IEC/TS 61836 Ed. 3.0 Solar photovoltaic energy systems - Terms, definitions and symbols 2012

Working Group 2

IEC 61215 Ed. 3.0 Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval 2013

IEC 61730-1 am2 Ed. 1.0 Amendment 2 to IEC 61730-1 Ed.1: Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction 2013

IEC 61730-2 Ed. 2.0 Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing 2014

IEC 61853-2 Ed. 1.0 Photovoltaic (PV) module performance testing and energy rating - Part 2: Spectral response, incidence angle and module operating temperature measurements 2013

IEC 62759-1 Ed. 1.0 Transportation testing of photovoltaic (PV) modules - Part 1: Transportation and shipping of PV module stacks 2013

IEC 62782 Ed. 1.0 Dynamic mechanical load testing for photovoltaic (PV) modules 2014

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WG2 (cont.)

IEC 62775 Ed. 1.0 Cross-linking degree test method for Ethylene-Vinyl Acetate applied in photovoltaic modules - Differential Scanning Calorimetry (DSC) 2014

IEC 62788-1-2 Ed.1 Measurement procedures for materials used in photovoltaic modules - Part 1-2: Encapsulants - Measurement of resistivity of photovoltaic encapsulation and backsheets materials 2015

IEC 62788-1-4 Ed.1 Measurement procedures for materials used in photovoltaic modules - Part 1-4: Encapsulants - Measurement of optical transmittance and calculation of the solar-weighted photon transmittance, yellowness index, and UV cut-off frequency 2015

PNW 82-654 Ed. 1.0 Photovoltaic devices - Part11: Measurement of initial light-induced degradation of crystalline silicon solar cells and photovoltaic modules 2014

PNW 82-668 Ed. 1.0 Future IEC 6XXXX-1-3 Ed.1: Measurement procedures for materials used in photovoltaic modules - Part 1-3: Encapsulants - Measurement of dielectric strength 2015

PNW 82-669 Ed. 1.0 Future IEC 6XXXX-1-5 Ed.1: Measurement procedures for materials used in photovoltaic modules - Part 1-5: Encapsulants - Measurement of change in linear dimensions of sheet encapsulation material under thermal conditions 2014

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WG2 (cont.)

IEC 62790 Ed. 1.0 Junction boxes for photovoltaic modules - Safety requirements and tests 2014

IEC 62852 Ed. 1.0 Connectors for DC-application in photovoltaic systems - Safety requirements and tests 2014

PNW 82-685 Ed. 1.0 System voltage durability test for crystalline silicon modules - Qualification and type approval 2013

PNW 82-689 Ed. 1.0 Test method for total haze and spectral distribution of haze of transparent conductive coated glass for solar cells 2014

PNW 82-690 Ed. 1.0 Edge protecting materials for laminated solar glass modules 2014

PNW 82-691 Ed. 1.0 Test method for transmittance and reflectance of transparent conductive coated glass for solar cells 2014

NWIP Comparative testing of PV modules to differentiate performance in multiple climates and applications - Part 1: Overall test sequence and method of communication 2014

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WG3 and WG6

Working Group 3

IEC 61829 Ed. 2.0 Crystalline silicon photovoltaic (PV) array - On-site measurement of I-V characteristics 2013

IEC/TS 62548 Ed. 1.0 Design requirements for photovoltaic (PV) arrays 2013

IEC/TS 62738 Ed. 1.0 Design guidelines and recommendations for photovoltaic power plants 2012

IEC/TS 62748 Ed. 1.0 PV systems on buildings 2012

Working Group 6

IEC 62109-4 Ed. 1.0 Safety of power converters for use in photovoltaic power systems - Part 4: Particular requirements for combiner box 2014

PNW 82-696 Ed. 1.0 Safety of power converters for use in photovoltaic power systems - Part 3: Particular requirements for PV modules with integrated electronics 2015

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WG7 and WG8

Working Group 7

IEC 62670-1 Ed. 1.0 Concentrator photovoltaic (CPV) module and assembly performance testing and energy rating - Part 1: Performance measurements and power rating - Irradiance and temperature 2013

IEC 62688 Ed. 1.0 Concentrator photovoltaic (CPV) module and assembly safety qualification 2013

IEC 62787 Ed. 1.0 Concentrator photovoltaic (CPV) solar cells and cell-on-carrier (COC) assemblies - Reliability qualification 2014

IEC/TS 62727 Ed. 1.0 Specification for solar trackers used for photovoltaic systems 2012

Working Group 8

New WG to be formed during 2013 - **seeking a volunteer** to be the Convenor

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Joint Working Groups

JWG 21/TC 82 Batteries

IEC 61427-2 Secondary cells and batteries for renewable energy storage
Part 2: On-grid applications

2014

JWG 1--TC 82/TC 88/TC21/SC21A

IEC/TS 62257-9-6 Ed. 2 Recommendations for small renewable energy and hybrid systems for rural electrification - Part 9-6 : Selection of Photovoltaic Individual Electrification Systems (PV-IES) [to include selection of PV powered LED lanterns]

2013