

TECHNICAL SPECIFICATION



**Photovoltaic (PV) modules – Type approval, design and safety qualification –
Retesting**



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Photovoltaic (PV) modules – Type approval, design and safety qualification – Retesting

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**PHOTOVOLTAIC (PV) MODULES – TYPE APPROVAL,
DESIGN AND SAFETY QUALIFICATION – RETESTING**

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IEC TS 62915 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems. It is a Technical Specification.

This publication contains attached files in the form of xls document. These files are intended to be used as a complement and do not form an integral part of the publication.

This second edition cancels and replaces the first edition published in 2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- Prior references to specific process-related changes to PV modules have been removed in this edition and replaced with a general requirement to ensure that a consistent quality management system is in place per IEC 62941

- References to IEC 61215 and IEC 61730 have been updated to the latest editions (2021 and 2023 respectively)
 - Retest requirements with respect to new added tests such as cyclic (dynamic) mechanical load (MQT 20) and potential-induced degradation (MQT 21) are addressed in this edition
- Retest requirements for IEC 61215 and IEC 61730 have been separated for the sake of clarity
- A comprehensive matrix table summarizing all the retest requirements for each possible change in material(s) or design modification is provided in this edition
- References to component level standards, namely IEC 62788-1 series and IEC 62788-2 series, are included in this edition to address changes that could be made to the critical sub-components going into new PV module constructions
- Crystalline silicon and thin film references have been updated to be consistent with nomenclature in the updated IEC 61215 and IEC 61730 standards; namely, wafer-based technology (WBT) and monolithically integrated (MLI) thin film PV modules
- In this edition, 4.3 which addresses retest requirements for MLI thin film PV modules has been truncated and simplified by removing redundant sections that are identical with the subclauses in 4.2
- Guidance for retesting modules according to IEC TS 63126, “Guidelines for qualifying PV modules, components and materials for operation at high temperatures” has been added to this edition
- In this edition, requirements have been added for changes affecting system compatibility with variants of the same model

The text of this technical specification is based on the following documents:

Enquiry draft	Reports on voting
82/2121/DTS	82/2157A/RVDTS

Full information on the voting for the approval of this technical specification can be found in the report on voting indicated in the above table.

The language used for the development of this Technical Specification is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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