**International Safety Standards for Photovoltaic Modules**

**UL provides Certification of PV Modules to IEC 61730 for Accelerated Global Market Access**

*The international standards for Photovoltaic (PV) module safety qualification were published for the first time in October of 2004. The IEC 61730 series has now been updated to adapt to the change in technologies of the PV module industry.*

**New Edition of IEC Safety Standard**

UL contributed significantly to this thoroughly revised international PV module safety standard covering current state of the technology and innovation in designs and materials. This edition of IEC 61730 also becomes the basis for the International Harmonization Committee (IHC) to harmonize with current US national requirements. The updates invest heavily in the understanding of 1,500V DC components and the materials used in the construction of PV modules such as cemented joints. The important and fundamental concepts from horizontal standards are also applied, such as the IEC 60664 series which defines and uses the concepts of “insulation coordination” and IEC 61140 which defines “equipment classes” that apply to PV modules. These standards cover factors that influence insulation requirements such as material groups, installation type, and location of the installation, pollution degree, system voltages, and over-voltages that may appear in the system.

**The IEC 61730 consists of 2 parts:**

- **Part 1:** Describes the construction requirements for photovoltaic (PV) modules in order to provide safe electrical and mechanical operation during their expected lifetime. Key updates include:
  - Clearly defined insulation requirements based on material properties, material groups, location of installation and installation type
  - Cemented joints concept for maintaining insulation requirements
  - Over-voltage categories, system voltage classes and protective means
  - Requirements for component approvals
- **Part 2:** Provides the testing sequence intended to verify the safety of PV modules whose construction has been assessed by IEC 61730 part 1.
  - This edition of the standard contains over 20 significant technical changes relative to the previous edition
  - A minimum of nine PV modules and one unframed PV module now required for the updated test sequences

For more information on UL services for the PV industry contact ULHELPS@UL.com or call 1.877.ULHELPS (1.877.854.3577)
Why UL?

UL drives global research and standards to continually advance and meet ever-evolving product safety, performance and interoperability needs. We partner with businesses, manufacturers, trade associations and international regulatory authorities to bring solutions to a more complex global supply chain.

Knowledge & Experience – As a contributing member of the IEC TC2 Working Group 2 we have deep understanding of the new requirements in IEC 61730 for specific market applications.

Speed & Efficiency – Our globally located state-of-the-art labs and combined testing for IEC 61730 and IEC 61215-series reduce certification turnaround time.

Single Source Services – Combine your testing to IEC and UL standards to save you valuable time and money and expand market access.

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