

<b>STN</b>	<b>Fotovoltaické systémy. Posúdenie návrhu zariadení na sledovanie polohy slnka.</b>	<b>STN EN 62817</b>  36 4622
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Photovoltaic systems - Design qualification of solar trackers

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/15

Obsahuje: EN 62817:2015, IEC 62817:2014

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Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD

**EN 62817**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2015

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English Version

**Photovoltaic systems - Design qualification of solar trackers  
(IEC 62817:2014)**

Systèmes photovoltaïques - Qualification de conception des  
suiveurs solaires  
(IEC 62817:2014)

Sonnen-Nachführeinrichtungen für photovoltaische  
Systeme - Bauarteignung  
(IEC 62817:2014)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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## Foreword

The text of document 82/853/FDIS, future edition 1 of IEC 62817, prepared by IEC/TC 82 "Solar photovoltaic energy systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62817:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-09-13
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## Annex ZA (normative)

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NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-6	-	Environmental testing -- Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-21	-	Environmental testing -- Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN 60068-2-21	-
IEC 60068-2-27	-	Environmental testing -- Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	-
IEC 60068-2-75	-	Environmental testing -- Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	-
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	-	-
IEC 60904-3	2008	Photovoltaic devices -- Part 3: Measurement principles for terrestrial photovoltaic (PV) solar devices with reference spectral irradiance data	EN 60904-3	2008
IEC 61000-4-5	2005	Electromagnetic compatibility (EMC) -- Part 4-5: Testing and measurement techniques - Surge immunity test	EN 61000-4-5	2006
IEC 62262	2002	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)	EN 62262	2002
ISO 12103-1	-	Road vehicles - Test dust for filter evaluation - Part 1: Arizona test dust	-	-
ISO/IEC 17025	-	General requirements for the competence of testing and calibration laboratories	EN ISO/IEC 17025	-



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Edition 1.0 2014-08

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**Photovoltaic systems – Design qualification of solar trackers**

**Systèmes photovoltaïques – Qualification de conception des suiveurs solaires**





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IEC 62817

Edition 1.0 2014-08

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



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**Photovoltaic systems – Design qualification of solar trackers**

**Systèmes photovoltaïques – Qualification de conception des suiveurs solaires**

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**PHOTOVOLTAIC SYSTEMS –  
DESIGN QUALIFICATION OF SOLAR TRACKERS**
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International Standard IEC 62817 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

The text of this design qualification standard is based on the following documents:

FDIS	Report on voting
82/853/FDIS	82/877/RVD

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

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## PHOTOVOLTAIC SYSTEMS – DESIGN QUALIFICATION OF SOLAR TRACKERS

### 1 Scope and object

This International Standard is a design qualification standard applicable to solar trackers for photovoltaic systems, but may be used for trackers in other solar applications. The standard defines test procedures for both key components and for the complete tracker system. In some cases, test procedures describe methods to measure and/or calculate parameters to be reported in the defined tracker specification sheet. In other cases, the test procedure results in a pass/fail criterion.

The objective of this design qualification standard is twofold.

First, this standard ensures the user of the said tracker that parameters reported in the specification sheet were measured by consistent and accepted industry procedures. This provides customers with a sound basis for comparing and selecting a tracker appropriate to their specific needs. This standard provides industry-wide definitions and parameters for solar trackers. Each vendor can design, build, and specify the functionality and accuracy with uniform definition. This allows consistency in specifying the requirements for purchasing, comparing the products from different vendors, and verifying the quality of the products.

Second, the tests with pass/fail criteria are engineered with the purpose of separating tracker designs that are likely to have early failures from those designs that are sound and suitable for use as specified by the manufacturer. Mechanical and environmental testing in this standard is designed to gauge the tracker's ability to perform under varying operating conditions, as well as to survive extreme conditions. Mechanical testing is not intended to certify structural and foundational designs, because this type of certification is specific to local jurisdictions, soil types, and other local requirements.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-6, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-21, *Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices*

IEC 60068-2-27, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60904-3:2008, *Photovoltaic devices – Part 3: Measurement principles for terrestrial photovoltaic (PV) solar devices with reference spectral irradiance data*

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