

STN	Fotovoltaické články Časť 1: Meranie svetelne indukovanej degradácie fotovoltaických článkov z kryštalického kremíka	STN EN IEC 63202-1 36 4608
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Photovoltaic cells - Part 1: Measurement of light-induced degradation of crystalline silicon photovoltaic cells

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. 01/20

Obsahuje: EN IEC 63202-1:2019, IEC 63202-1:2019

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EUROPEAN STANDARD

EN IEC 63202-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2019

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English Version

Photovoltaic cells - Part 1: Measurement of light-induced degradation of crystalline silicon photovoltaic cells (IEC 63202-1:2019)

Cellules photovoltaïques - Partie 1: Mesure de la dégradation induite par la lumière des cellules photovoltaïques au silicium cristallin (IEC 63202-1:2019)

Photovoltaik-Zellen - Teil 1: Messung der lichtinduzierten Degradation von kristallinen Silizium-Photovoltaikzellen (IEC 63202-1:2019)

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 63202-1:2019 (E)**European foreword**

The text of document 82/1565/FDIS, future edition 1 of IEC 63202-1, prepared by IEC/TC 82 "Solar photovoltaic energy systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63202-1:2019.

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) 2020-04-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-25

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Annex ZA (normative)

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NOTE 1 Where 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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60904-1	-	Photovoltaic devices - Part 1: Measurement of photovoltaic current-voltage characteristics	EN 60904-1	-
IEC 60904-2	-	Photovoltaic devices - Part 2: Requirements for photovoltaic reference devices	EN 60904-2	-
IEC 60904-9	-	Photovoltaic devices - Part 9: Solar simulator performance requirements	EN 60904-9	-



IEC 63202-1

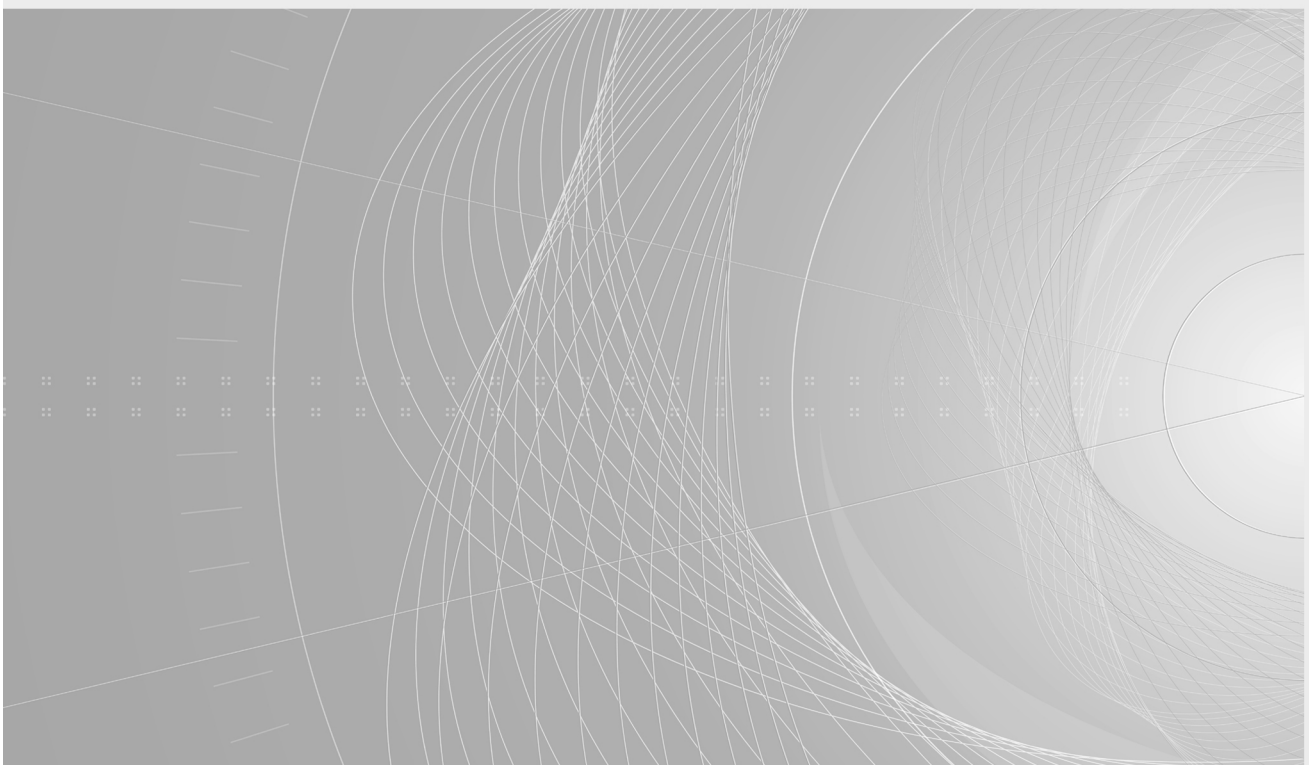
Edition 1.0 2019-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Photovoltaic cells –
Part 1: Measurement of light-induced degradation of crystalline silicon
photovoltaic cells**

**Cellules photovoltaïques –
Partie 1: Mesure de la dégradation induite par la lumière des cellules
photovoltaïques au silicium cristallin**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PHOTOVOLTAIC CELLS –

**Part 1: Measurement of light-induced degradation
of crystalline silicon photovoltaic cells**

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International Standard IEC 63202-1 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
82/1565/FDIS	82/1583/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.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 63202 series, published under the general title *Photovoltaic cells*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
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- replaced by a revised edition, or
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PHOTOVOLTAIC CELLS –

Part 1: Measurement of light-induced degradation of crystalline silicon photovoltaic cells

1 Scope

This part of IEC 63202 describes procedures for measuring the light-induced degradation (LID) of crystalline silicon photovoltaic (PV) cells in simulated sunlight. The magnitude of LID in a crystalline silicon PV cell is determined by comparing maximum output power at Standard Test Conditions (STC) before, and after, exposure to simulated sunlight at a specified temperature and irradiance.

The purpose of this document is to provide standardized PV cell LID information to help PV module manufacturers in minimizing the mismatch between cells within the same module, thereby maximizing power yield.

When compared to PV module LID measurements described in the IEC 61215 series, several extra experimental factors have been found to show significant impact on the PV cell LID test, which were not considered by IEC 61215-2. This document provides a conditioning and measurements procedure and parameter settings required for consistent PV cell LID measurements.

LID magnitude is one important factor of cell quality. For cells from the same sorting bin, the most important factor is the distribution of output power after LID.

2 Normative references

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IEC 60904-1, *Photovoltaic devices – Part 1: Measurements of photovoltaic current-voltage characteristics*

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