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Photovoltaic devices - Part 2: Requirements for photovoltaic reference devices

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

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

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English Version

**Photovoltaic devices -
Part 2: Requirements for photovoltaic reference devices
(IEC 60904-2:2015)**

Dispositifs photovoltaïques -
Partie 2: Exigences applicables aux dispositifs
photovoltaïques de référence
(IEC 60904-2:2015)

Photovoltaische Einrichtungen -
Teil 2: Anforderungen an Referenz-Solarelemente
(IEC 60904-2:2015)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 82/893/FDIS, future edition 3 of IEC 60904-2, prepared by IEC/TC 82 "Solar photovoltaic energy systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60904-2:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2015-11-27 national level by publication of an identical national standard or by endorsement
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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60891	-	Photovoltaic devices - Procedures for temperature and irradiance corrections to measured I-V characteristics	EN 60891	-
IEC 60904-1	-	Photovoltaic devices -- Part 1: Measurement of photovoltaic current-voltage characteristics	EN 60904-1	-
IEC 60904-3	-	Photovoltaic devices - Part 3: Measurement principles for terrestrial photovoltaic (PV) solar devices with reference spectral irradiance data	EN 60904-3	-
IEC 60904-4	-	Photovoltaic devices - Part 4: Reference solar devices - Procedures for establishing calibration traceability	EN 60904-4	-
IEC 60904-5	-	Photovoltaic devices -- Part 5: Determination of the equivalent cell temperature (ECT) of photovoltaic (PV) devices by the open-circuit voltage method	EN 60904-5	-
IEC 60904-7	-	Photovoltaic devices -- Part 7: Computation of the spectral mismatch correction for measurements of photovoltaic devices	EN 60904-7	-
IEC 60904-8	-	Photovoltaic devices -- Part 8: Measurement of spectral response of a photovoltaic (PV) device	EN 60904-8	-
IEC 60904-9	-	Photovoltaic devices -- Part 9: Solar simulator performance requirements	EN 60904-9	-
IEC 60904-10	-	Photovoltaic devices -- Part 10: Methods of linearity measurement	EN 60904-10	-
IEC/TS 61836	-	Solar photovoltaic energy systems - Terms, definitions and symbols	CLC/TS 61836	-



INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Photovoltaic devices –
Part 2: Requirements for photovoltaic reference devices**

**Dispositifs photovoltaïques –
Partie 2: Exigences applicables aux dispositifs photovoltaïques de référence**





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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Part 2: Requirements for photovoltaic reference devices**

**Dispositifs photovoltaïques –
Partie 2: Exigences applicables aux dispositifs photovoltaïques de référence**

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PHOTOVOLTAIC DEVICES –**Part 2: Requirements for photovoltaic reference devices****FOREWORD**

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International Standard IEC 60904-2 has been prepared by IEC Technical Committee 82: Solar photovoltaic energy systems.

This third edition cancels and replaces the second edition, published in 2007. It constitutes a technical revision.

The main technical changes with regard to the previous edition are as follows:

- addition of a test procedure in simulated sunlight of subsequent measurement of primary and secondary reference device;
- definition of standard test conditions;
- reduction of allowed diffuse component for secondary reference cell calibration to 20 %.

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

FDIS	Report on voting
82/893/FDIS	82/918/RVD

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

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

A list of all parts in the IEC 60904 series, published under the general title *Photovoltaic devices*, can be found on the IEC website.

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PHOTOVOLTAIC DEVICES –

Part 2: Requirements for photovoltaic reference devices

1 Scope

This part of IEC 60904 gives requirements for the classification, selection, packaging, marking, calibration and care of photovoltaic reference devices.

This standard covers photovoltaic reference devices used to determine the electrical performance of photovoltaic cells, modules and arrays under natural and simulated sunlight. It does not cover photovoltaic reference devices for use under concentrated sunlight.

2 Normative references

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IEC 60904-4, *Photovoltaic devices – Part 4: Reference solar devices – Procedures for establishing calibration traceability*

IEC 60904-5, *Photovoltaic devices – Part 5: Determination of the equivalent cell temperature (ECT) of photovoltaic (PV) devices by the open-circuit voltage method*

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IEC 60904-10, *Photovoltaic devices – Part 10: Methods of linearity measurement*

IEC TS 61836, *Solar photovoltaic energy systems – Terms, definitions and symbols*

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