

SLOVENSKI STANDARD

SIST EN 60904-5:2011

01-junij-2011

Nadomešča:
SIST EN 60904-5:2001

Fotonapetostne naprave - 5. del: Določanje ekvivalentne temperature celice (ECT) fotonapetostnih (PV) naprav po metodi napetosti odprtih sponk (IEC 60904-5:2011)

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

Photovoltaische Einrichtungen - Teil 5: Bestimmung der gleichwertigen Zellentemperatur von photovoltaischen (PV) Betriebsmitteln nach dem Leerlaufspannungs-Verfahren

Dispositifs photovoltaïques - Partie 5: Détermination de la température de cellule équivalente (ECT) des dispositifs photovoltaïques (PV) par la méthode de la tension en circuit ouvert

Ta slovenski standard je istoveten z: EN 60904-5:2011

ICS:

27.160 Sončna energija Solar energy engineering

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60904-5

April 2011

ICS 27.160

Supersedes EN 60904-5:1995

English version

**Photovoltaic devices -
Part 5: Determination of the equivalent cell temperature (ECT) of
photovoltaic (PV) devices by the open-circuit voltage method
(IEC 60904-5:2011)**

Dispositifs photovoltaïques -
Partie 5: Détermination de la température
de cellule équivalente (ECT) des
dispositifs photovoltaïques (PV) par la
méthode de la tension en circuit ouvert
(CEI 60904-5:2011)

Photovoltaische Einrichtungen -
Teil 5: Bestimmung der gleichwertigen
Zellentemperatur von photovoltaischen
(PV) Betriebsmitteln nach dem
Leerlaufspannungs-Verfahren
(IEC 60904-5:2011)

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This European Standard was approved by CENELEC on 2011-03-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 82/595/CDV, future edition 2 of IEC 60904-5, prepared by IEC TC 82, Solar photovoltaic energy systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60904-5 on 2011-03-24.

This European Standard supersedes EN 60904-5:1995.

The main technical changes with regard to EN 60904-5:1995 are as follows:

- added and updated normative references;
- added reporting section;
- added method on how to extract the input parameters;
- rewritten method on how to calculate ECT;
- reworked formulae to be in line with EN 60891.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2011-12-24
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-03-24

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60904-5:2011 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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

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

<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 60904-2	-	Photovoltaic devices - Part 2: Requirements for reference solar devices	EN 60904-2	-
IEC 60904-7	-	Photovoltaic devices - Part 7: Computation of the spectral mismatch correction for measurements of photovoltaic devices	EN 60904-7	-
IEC 60904-10	-	Photovoltaic devices - Part 10: Methods of linearity measurement	EN 60904-10	-
IEC 61215	-	Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval	EN 61215	-
IEC 61829	-	Crystalline silicon photovoltaic (PV) array - On-site measurement of I-V characteristics	EN 61829	-
ISO/IEC 17025	-	General requirements for the competence of testing and calibration laboratories	EN ISO/IEC 17025	-

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NORME INTERNATIONALE

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Part 5: Determination of the equivalent cell temperature (ECT) of photovoltaic (PV) devices by the open-circuit voltage method

Dispositifs photovoltaïques –
Partie 5: Détermination de la température de cellule équivalente (ECT) des dispositifs photovoltaïques (PV) par la méthode de la tension en circuit ouvert

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PHOTOVOLTAIC DEVICES –

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

FOREWORD

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International Standard IEC 60904-5 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

This second edition cancels and replaces the first edition, issued in 1993, and constitutes a technical revision.

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

- added and updated normative references;
- added reporting section;
- added method on how to extract the input parameters;
- rewritten method on how to calculate ECT;
- reworked formulae to be in line with IEC 60891.