



**NSAI**  
Standards

Irish Standard  
I.S. EN 61300-2-19:2013

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures -- Part 2-19: Tests - Damp heat (steady state) (IEC 61300-2-19:2012 (EQV))

## I.S. EN 61300-2-19:2013

*Incorporating amendments/corrigenda issued since publication:*

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EUROPEAN STANDARD  
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EUROPÄISCHE NORM

**EN 61300-2-19**

February 2013

ICS 33.180.20

Supersedes EN 61300-2-19:2005

English version

**Fibre optic interconnecting devices and passive components -  
Basic test and measurement procedures -  
Part 2-19: Tests -  
Damp heat (steady state)  
(IEC 61300-2-19:2012)**

Dispositifs d'interconnexion et composants  
passifs à fibres optiques -  
Méthodes fondamentales d'essais et de  
mesures -  
Partie 2-19: Essais -  
Chaleur humide (essai continu)  
(CEI 61300-2-19:2012)

Lichtwellenleiter -  
Verbindungselemente und passive  
Bauteile -  
Grundlegende Prüf- und Messverfahren -  
Teil 2-19: Prüfungen -  
Feuchte Wärme (konstant)  
(IEC 61300-2-19:2012)

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

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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 86B/3491/FDIS, future edition 3 of IEC 61300-2-19, prepared by SC 86B, "Fibre optic interconnecting devices and passive components", of IEC TC 86, "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61300-2-19:2013.

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) 2013-09-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2013-12-12

This document supersedes EN 61300-2-19:2005.

The changes with respect to EN 61300-2-19:2005 are to reconsider the severities and details to be specified.

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

## **Endorsement notice**

The text of the International Standard IEC 61300-2-19:2012 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 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.

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 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 61300-3-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	-
IEC 61300-3-3	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss	EN 61300-3-3	-
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-4: Examinations and measurements - Attenuation	EN 61300-3-4	-

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –**

#### **Part 2-19: Tests – Damp heat (steady state)**

#### FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61300-2-19 has been prepared by subcommittee SC86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition published in 2005. It constitutes a technical revision. The changes with respect to the previous edition are to reconsider the severities and details to be specified.



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

FDIS	Report on voting
86B/3492/FDIS	86B/3536/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.

The list of all parts of IEC 61300 series, published under the general title, *Fibre optic interconnecting and passive components – Basic test and measurement procedures*, can be found on the IEC website.

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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## **FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –**

### **Part 2-19: Tests – Damp heat (steady state)**

#### **1 Scope**

This part of IEC 61300 details a procedure for determining the suitability of a fibre optic device to withstand the environmental condition of high humidity and high temperature which may occur in actual use, storage and/or transport. The test is primarily intended to permit the observation of effects of high humidity at constant temperature over a given period. Absorption of moisture may result in swelling that would destroy functional utility, cause loss of physical strength, and cause changes in other important mechanical properties. Degradation of optical properties may also occur. Although not necessarily intended as a simulated tropical test, this test can, nevertheless, be useful in determining moisture absorption of insulating or covering materials.

#### **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 60068-2-78, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

IEC 61300-3-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

IEC 61300-3-3, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-3: Examinations and measurements – Active monitoring of changes in attenuation and return loss*

IEC 61300-3-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examinations and measurements – Attenuation*

#### **3 General description**

This procedure is conducted in accordance with IEC 60068-2-78, Test Cab. The specimen is placed in a chamber and subjected to a damp-heat environment which is maintained at a given temperature and relative humidity for a specified duration, as specified in the relevant specification.

#### **4 Apparatus**

##### **4.1 Chamber**

The apparatus consists of an environmental chamber in accordance with IEC 60068-2-78, test Cab. The chamber shall be capable of housing the specimen and shall be so constructed that:

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