Fibre optics - Launch condition requirements for measuring multimode attenuation



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#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 62614:2010 sisaldab Euroopa standardi EN 62614:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.11.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.10.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 62614:2010 consists of the English text of the European standard EN 62614:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 15.10.2010.

The standard is available from Estonian standardisation organisation.

ICS 33.180.01

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### **EUROPEAN STANDARD**

### EN 62614

## NORME EUROPÉENNE EUROPÄISCHE NORM

October 2010

ICS 33.180.01

English version

# Fibre optics Launch condition requirements for measuring multimode attenuation (IEC 62614:2010)

Fibres optiques -Exigences des conditions d'injection pour la mesure de l'affaiblissement en multimodal (CEI 62614:2010) Lichtwellenleiter -Anforderungen an die Anregungsbedingungen für Mehrmoden-Dämpfungsmessungen (IEC 62614:2010)

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## CENELEC

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

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#### **Foreword**

The text of document 86/367/FDIS, future edition 1 of IEC 62614, prepared by IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62614 on 2010-10-01.

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) 2011-07-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2013-10-01

Annex ZA has been added by CENELEC.

#### **Endorsement notice**

4:2010 WE The text of the International Standard IEC 62614:2010 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>	EN/HD	<u>Year</u>
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	-
IEC 61280-1-4	-	Fibre optic communication subsystem test procedures - Part 1-4: General communication subsystems - Light source encircled flux measurement method	EN 61280-1-4	-
IEC 61280-4-1	2009	Fibre optic communication subsystem test procedures - Part 4-1: Installed cable plant - Multimode attenuation measurement	EN 61280-4-1	2009
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# FIBRE OPTICS – LAUNCH CONDITION REQUIREMENTS FOR MEASURING MULTIMODE ATTENUATION

#### 1 Scope

This International Standard describes the launch condition requirements used for measuring multimode attenuation in passive components and in installed cable plants.

In this standard, the fibre types that are addressed include category A1a (50  $\mu m$  /125  $\mu m)$  and A1b (62,5  $\mu m$  /125  $\mu m)$  multimode fibres, as specified in IEC 60793-2-10. The nominal test wavelengths detailed are 850 nm and 1 300 nm. This standard may be suitable for multimode attenuation measurements for other multimode categories and/or other wavelengths, but the source condition for other categories and wavelengths are not defined here.

The purpose of these requirements is as follows:

- to ensure consistency of field measurements when different types of test equipment are used:
- to ensure consistency of factory measurements when different types of test equipment are used;
- to ensure consistency of field measurements when compared with factory measurements.

This standard describes launch condition requirements for optical attenuation using sources with a controlled encircled flux (EF).

#### 2 Normative references

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.

IEC 60793-2-10, Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres

IEC 61280-1-4, Fibre optic communication subsystem test procedures – Part 1-4: General communication subsystems – Light source encircled flux measurement method

IEC 61280-4-1:2009, Fibre optic communication subsystem test procedures – Part 4-1: Installed cable plant – Multimode attenuation measurement

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE In this clause only specific terms and definitions for the purposes of this document are provided. For common fibre optic terms, reference is made to IEC/TR 61931.