

Irish Standard I.S. EN 62150-2:2011

Fibre optic active components and devices - Test and measurement procedures -- Part 2: ATM-PON transceivers (IEC 62150-2:2010 (EQV))

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### **EUROPEAN STANDARD**

EN 62150-2

NORME EUROPÉENNE EUROPÄISCHE NORM

January 2011

ICS 33.180.20

Supersedes EN 62150-2:2004

English version

# Fibre optic active components and devices Test and measurement procedures Part 2: ATM-PON transceivers

(IEC 62150-2:2010)

Composants et dispositifs actifs à fibres optiques Procédures d'essais et de mesures Partie 2: Emetteurs-récepteurs ATM-PON (CEI 62150-2:2010)

Aktive Lichtwellenleiter-Bauteile und -Bauelemente -Prüf- und Messverfahren -Teil 2: ATM-PON-Sende- und Empfangsmodule (IEC 62150-2:2010)

This European Standard was approved by CENELEC on 2011-01-13. 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

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### **Foreword**

The text of document 86C/974/FDIS, future edition 2 of IEC 62150-2, prepared by SC 86C, Fibre optic systems and active devices, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62150-2 on 2011-01-13.

This European Standard supersedes EN 62150-2:2004.

The significant technical change to EN 62150-2:2004 is:

The power meter requires higher saturation power than  $2 \times P_{\text{mean}}$  for  $P_{\text{ave}}$  measurement in 7.3.3.

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) 2011-10-13

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2014-01-13

Annex ZA has been added by CENELEC.

### **Endorsement notice**

The text of the International Standard IEC 62150-2:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60617 series	NOTE	Harmonized in EN 60617 series (not modified).
IEC 60793 series	NOTE	Harmonized in EN 60793 series (not modified).
IEC 60794 series	NOTE	Harmonized in EN 60794 series (not modified).
IEC 60874 series	NOTE	Harmonized in EN 60874 series (not modified).
IEC 61280 series	NOTE	Harmonized in EN 61280 series (not modified).
IEC 61300 series	NOTE	Harmonized in EN 61300 series (not modified).
IEC 61315:1995	NOTE	Harmonized as EN 61315:1997 (not modified).
IEC 62148-6	NOTE	Harmonized as EN 62148-6.

EN 62150-2:2011

## 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 61280-1-3	1998	Fibre optic communication subsystem basic test procedures - Part 1-3: Test procedures for general communication subsystems - Central wavelength and spectral width measurement	EN 61280-1-3 <sup>1)</sup>	1999
IEC 61280-2-2	2008	Fibre optic communication subsystem test procedures - Part 2-2: Digital systems - Optical eye pattern waveform and extinction ratio measurement	EN 61280-2-2 ,	2008
IEC 62149-5	2009	Fibre optic active components and devices - Performance standards - Part 5: ATM-PON transceivers with LD driver and CDR ICs	EN 62149-5	201X <sup>2)</sup>
ITU-T G.983.1	-	Broadband optical access systems based on Passive Optical Networks (PON)	-	-

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 $<sup>^{1)}</sup>$  EN 61280-1-3 is superseded by EN 61280-1-3:2010, which is based on IEC 61280-1-3:2010.

<sup>&</sup>lt;sup>2)</sup> To be published.

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### INTERNATIONAL ELECTROTECHNICAL COMMISSION

## FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES – TEST AND MEASUREMENT PROCEDURES –

Part 2: ATM-PON transceivers

### **FOREWORD**

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International Standard IEC 62150-2 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2004. It constitutes a technical revision.

The significant technical change to the first edition is:

The power meter requires higher saturation power than 2  $\times$   $P_{\text{mean}}$  for  $P_{\text{ave}}$  measurement in Clause 7.3.3.

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

FDIS	Report on voting		
86C/974/FDIS	86C/977/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 the parts in the IEC 62150 series, under the general title *Fibre optic active components and devices – 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.

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### INTRODUCTION

This International Standard specifies testing and measuring procedures for optoelectronic properties of asynchronous-transfer-mode passive optical network (ATM-PON) transceivers. The package interface dimensions and optoelectronic performance of the transceivers are defined in IEC 62148-6 and IEC 62149-5, respectively.



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