

STN	Optovláknové aktívne súčiastky a prvky Normy na puzdro a rozhranie Časť 6: Vysielače-prijímače ATM-PON	STN EN IEC 62148-6 35 9255
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Fibre optic active components and devices - Package and interface standards - Part 6: ATM-PON transceivers

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/20

Obsahuje: EN IEC 62148-6:2020, IEC 62148-6:2020

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EUROPEAN STANDARD

EN IEC 62148-6

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 33.180.20

Supersedes EN 62148-6:2003 and all of its amendments
and corrigenda (if any)

English Version

**Fibre optic active components and devices - Package and
interface standards - Part 6: ATM-PON transceivers
(IEC 62148-6:2020)**

Composants et dispositifs actifs fibroniques - Normes de
boîtier et d'interface - Partie 6: Emetteurs-récepteurs ATM-
PON
(IEC 62148-6:2020)

Aktive Lichtwellenleiterbauelemente und -geräte - Gehäuse-
und Schnittstellennormen - Teil 6: ATM-PON Sende- und
Empfangsmodule
(IEC 62148-6:2020)

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Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62148-6:2020 (E)**European foreword**

The text of document 86C/1590/CDV, future edition 2 of IEC 62148-6, 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 approved by CENELEC as EN IEC 62148-6:2020.

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- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-12-31
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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60130 (series)	NOTE	Harmonized as EN 60130 (series)
IEC 60191 (series)	NOTE	Harmonized as EN 60191 (series)
IEC 60603 (series)	NOTE	Harmonized as EN 60603 (series)
IEC 60794 (series)	NOTE	Harmonized as EN 60794 (series)
IEC 60825 (series)	NOTE	Harmonized as EN 60825 (series)
IEC 61076 (series)	NOTE	Harmonized as EN 61076 (series)
IEC 61281-1	NOTE	Harmonized as EN IEC 61281-1
ISO 1101	NOTE	Harmonized as EN ISO 1101

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where 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 60793-2	series	Optical fibres - Part 2: Product specifications	EN IEC 60793-2	series
IEC 60874	series	Fibre optic interconnecting devices and passive components - Connectors for optical fibres and cables	-	-
IEC 61754	series	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces	-	-
IEC 62148-1	-	Fibre optic active components and devices - Package and interface standards - Part 1: General and guidance	EN IEC 62148-1	-
ITU-T G.652	-	Characteristics of a single-mode optical fibre and cable	-	-
ITU-T G.657	-	Characteristics of a bending-loss insensitive single-mode optical fibre and cable	-	-
ITU-T G.983.1	-	Broadband optical access systems based on Passive Optical Networks (PON)	-	-



IEC 62148-6

Edition 2.0 2020-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic active components and devices – Package and interface standards –
Part 6: ATM-PON transceivers**

**Composants et dispositifs actifs fibroniques – Normes de boîtier et d'interface –
Partie 6: Emetteurs-récepteurs ATM-PON**



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL STANDARD

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Part 6: ATM-PON transceivers**

**Composants et dispositifs actifs fibroniques – Normes de boîtier et d'interface –
Partie 6: Emetteurs-récepteurs ATM-PON**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES –
PACKAGE AND INTERFACE STANDARDS –****Part 6: ATM-PON transceivers**

FOREWORD

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International Standard IEC 62148-6 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 2003, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) inconsistency of types in Clause 4 has been resolved;
- b) part and titles list in the Foreword has been deleted;
- c) references have been updated.

The text of this International Standard is based on the following documents:

CDV	Report on voting
86C/1590/CDV	86C/1613/RVC

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

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

A list of all parts in the IEC 62148 series, published under the general title *Fibre optic active components and devices – Package and interface standards*, can be found on the IEC website.

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

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

INTRODUCTION

Fibre optic transceivers are used to convert electrical signals into optical signals and vice versa. This document covers the physical interface for transceivers for ATM-PON systems. This transceiver is designed as a 24-pin package for use with through holes on the printed circuit board.

FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES – PACKAGE AND INTERFACE STANDARDS –

Part 6: ATM-PON transceivers

1 Scope

This part of IEC 62148 covers the physical interface specification of optical transceivers for asynchronous transfer mode-passive optical network (ATM-PON) systems recommended by the International Telecommunication Union (ITU) as ITU Recommendation G.983.1.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

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IEC 60874 (all parts), *Fibre optic interconnecting devices and passive components – Connectors for optical fibres and cables*

IEC 61754 (all parts), *Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces*

IEC 62148-1, *Fibre optic active components and devices – Package and interface standards – Part 1: General and guidance*

ITU-T Recommendation G.652, *Characteristics of a single-mode optical fibre and cable*

ITU-T Recommendation G.657, *Characteristics of a bending-loss insensitive single-mode optical fibre and cable*

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