ICS 33.180.20 SLOVENSKÁ TECHNICKÁ NORMA August 2015

STN	**Optovláknové aktívne súčiastky a prvky. Normy na puzdro a rozhranie. Časť 18: Sériové vysielacie a prijímacie moduly pre rozhrania 40-Gbit/s s LC konektorom.**	**STN EN 62148-18** 35 9255

Fibre optic active components and devices - Package and interface standards - Part 18: 40-Gbit/s serial transmitter and receiver components for use with the LC connector interface

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. 07/15

Obsahuje: EN 62148-18:2015, IEC 62148-18:2014

121128

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62148-18

January 2015

ICS 33.180.20

English Version

Fibre optic active components and devices - Package and interface standards - Part 18: 40-Gbit/s serial transmitter and receiver components for use with the LC connector interface (IEC 62148-18:2014)

Composants et dispositifs actifs à fibres optiques - Normes de boîtier et d'interface - Partie 18 : Composants d'émetteurs et de récepteurs série à 40 Gbit/s, destinés à être utilisés avec les interfaces des connecteurs LC (IEC 62148-18:2014)

Aktive Lichtwellenleiterbauelemente und -geräte - Gehäuse- und Schnittstellennormen - Teil 18: Serielle Sende- und Empfangsmodule für 40 Gbit/s für Schnittstellen mit LC-Steckverbinder (IEC 62148-18:2014)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 86C/1227/CDV, future edition 1 of IEC 62148-18, 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 62148-18:2015.

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) 2015-09-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-12-30

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The text of the International Standard IEC 62148-18:2014 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 60191	NOTE	Harmonized in EN 60191 series (not modified).
IEC 61281-1	NOTE	Harmonized as EN 61281-1.
IEC 61754-20	NOTE	Harmonized as EN 61754-20.
ISO 1101	NOTE	Harmonized as EN ISO 1101.

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 1 When 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.

Publication	Year	Title	EN/HD	Year
IEC 62148-1	-	Fibre optic active components and devices - Package and interface standards - Part 1: General and guidance	EN 62148-1	-
IEC Guide 107	-	Electromagnetic compatibility - Guide to the drafting of electromagnetic compatibility publications	-	-

IEC 62148-18

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INTERNATIONAL STANDARD

Fibre optic active components and devices – Package and interface standards – Part 18: 40-Gbit/s serial transmitter and receiver components for use with the LC connector interface

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Fibre optic active components and devices – Package and interface standards – Part 18: 40-Gbit/s serial transmitter and receiver components for use with the LC connector interface

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

Part 18: 40-Gbit/s serial transmitter and receiver components for use with the LC connector interface

FOREWORD

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International Standard IEC 62148-18 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

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

CDV	Report on voting
86C/1227/CDV	86C/1273/RVC

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 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 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.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

Compact optical sub-assembly (OSA) modules for 40 Gbit/s are used to convert electrical signals into optical signals and vice-versa. This part of IEC 62148 covers the physical interface for 40-Gbit/s compact OSA modules. These modules are designed for use with the LC fibre optic connector specified in IEC 61754-20, and are intended to be applied to 40 Gbit/s or higher bit rate transceivers.

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

Part 18: 40-Gbit/s serial transmitter and receiver components for use with the LC connector interface

1 Scope

This part of IEC 62148 covers the 40-Gbit/s serial physical interface specification of transmitter and receiver components for use with the LC connector interface.

The purpose of this standard is to adequately specify the physical requirements of optical transmitters and receivers that will enable mechanical interchangeability of transmitters and receivers complying with this standard both at the PCB level and for any panel-mounting requirement.

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

IEC Guide 107, *Electromagnetic compatibility – Guide to the drafting of electromagnetic compatibility publications*