



**SLOVENSKI STANDARD**  
**SIST EN 62148-12:2005/A1:2023**

**01-januar-2023**

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**Aktivne komponente in naprave z optičnimi vlakni - Standardi za ohišja in vmesnike - 12. del: Laserski oddajniki s koaksialnim RF-konektorjem - Dopolnilo A1 (IEC 62148-12:2004/AMD1:2022)**

Fibre optic active components and devices - Package and interface standards - Part 12: Laser transmitters with a coaxial RF connector (IEC 62148-12:2004/AMD1:2022)

Aktive Lichtwellenleiterbauelemente und -geräte - Gehäuse- und Schnittstellennormen - Teil 12: Lasersender mit HF-Koaxialstecker (IEC 62148-12:2004/AMD1:2022)

Composants et dispositifs actifs en fibres optiques - Normes de boîtier et d'interface - Partie 12: Emetteurs à laser avec connecteur RF coaxial (IEC 62148-12:2004/AMD1:2022)

**Ta slovenski standard je istoveten z: EN 62148-12:2004/A1:2022**

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**ICS:**

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
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**SIST EN 62148-12:2005/A1:2023** en



EUROPEAN STANDARD

EN 62148-12:2004/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2022

ICS 33.180.20

English Version

Fibre optic active components and devices - Package and  
interface standards - Part 12: Laser transmitters with a coaxial  
RF connector  
(IEC 62148-12:2004/AMD1:2022)

Composants et dispositifs actifs en fibres optiques - Normes  
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Aktive Lichtwellenleiterbauelemente und -geräte - Gehäuse-  
und Schnittstellennormen - Teil 12: Lasersender mit HF-  
Koaxialstecker  
(IEC 62148-12:2004/AMD1:2022)

This amendment A1 modifies the European Standard EN 62148-12:2004; it was approved by CENELEC on 2022-10-27. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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

**EN 62148-12:2004/A1:2022 (E)****European foreword**

The text of document 86C/1786/CDV, future IEC 62148-12/AMD1, 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 62148-12:2004/A1:2022.

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) 2023-07-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-10-27

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

**Endorsement notice**

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The text of the International Standard IEC 62148-12:2004/AMD1:2022 was approved by CENELEC as a European Standard without any modification.

[SIST EN 62148-12:2005/A1:2023](https://standards.iteh.ai/catalog/standards/sist/33eacc83-0658-4632-a9fa-2b68df2909bc/sist-en-62148-12-2005-a1-2023)

<https://standards.iteh.ai/catalog/standards/sist/33eacc83-0658-4632-a9fa-2b68df2909bc/sist-en-62148-12-2005-a1-2023>

## 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](http://www.cenelec.eu).

The Annex ZA of EN 62148-12:2004 applies with the following changes:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
<i>Replace the existing reference to IEC 60169-15 and IEC 60169-16 with the following new references:</i>				
IEC 61169-15	-	Radio-frequency connectors - Part 15: Sectional specification - RF coaxial connectors with inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling - Characteristic impedance 50 $\Omega$ (type SMA)	EN IEC 61169-15	-
IEC 61169-16	-	Radio-frequency connectors Part 16: Sectional specification - RF coaxial connectors with inner diameter of outer conductor 7 mm (0,276 in) with screw coupling - Characteristics impedance 50 $\Omega$ (75 $\Omega$ ) (type N)	EN 61169-16	-





# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

**Fibre optic active components and devices – Package and interface standards –  
Part 12: Laser transmitters with a coaxial RF connector**

**Composants et dispositifs actifs en fibres optiques – Normes de boîtier et  
d'interface –**

**Partie 12: Émetteurs à laser avec connecteur RF coaxial**

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ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES –  
PACKAGE AND INTERFACE STANDARDS –****Part 12: Laser transmitters with a coaxial RF connector****AMENDMENT 1****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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Amendment 1 to IEC 62148-12:2004 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

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

Draft	Report on voting
86C/1786/CDV	86C/1812/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.



This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications/](http://www.iec.ch/standardsdev/publications/).

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](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.

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## FOREWORD

*Delete, in the existing penultimate paragraph, the following list of documents:*

- Part 1: General and guidance
- Part 2: SFF MT-RJ 10-pin transceivers
- Part 3: SFF MT-RJ 20-pin transceivers
- Part 4: PN 1x9 plastic optical fibres transceivers
- Part 5: SC 1x9 fibre optic modules
- Part 6: ATM-PON transceivers
- Part 7: SFF LC 10-pin transceivers
- Part 8: SFF LC 20-pin transceivers
- Part 9: SFF MU duplex 10-pin transceivers
- Part 10: SFF MU duplex 20-pin transceivers
- Part 11: 14-pin modulator-integrated laser diode transmitters
- Part 12: Laser transmitters with a coaxial RF connector

## 2 Normative references

*Replace, in the list of normative references, the existing reference to IEC 60169-15 with the following new reference:*

IEC 61169-15, *Radio-frequency connectors – Part 15: Sectional specification – RF coaxial connectors with inner diameter of outer conductor 4,13 mm (0,163 in) with threaded coupling – Characteristic impedance 50  $\Omega$  (type SMA)*

*Replace, in the list of normative references, the existing reference to IEC 60169-16 with the following new reference:*

IEC 61169-16, *Radio-frequency connectors – Part 16: Sectional specification – RF coaxial connectors with inner diameter of outer conductor 7 mm (0,276 in) with screw coupling – Characteristics impedance 50  $\Omega$  (75  $\Omega$ ) (type N)*

### **3.4 subminiature SMA**

*Replace, in the definition, the existing reference "IEC 60169-15" with the new reference "IEC 61169-15".*

## **4 Classification**

*Replace, in the existing paragraph, the words "Type 5" with "Type 7".*

### **5.2.3 Coaxial connector**

*Replace, in the second sentence of the existing paragraph, the words "which is defined in IEC 60169-16 and IEC 60169-15" with "which is defined in IEC 61169-16 and IEC 61169-15".*

### **Figure 2 – Case outline**

*Replace, in the note to the existing table, the reference "IEC 60169-15" with "IEC 61169-15".*

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