

SLOVENSKI STANDARD SIST EN 62148-3:2011

01-marec-2011

Nadomešča:

SIST EN 62148-3:2004

Aktivne komponente in naprave optičnih vlaken - Standardi oblike in vmesnika - 3. del: SFF 20 kontaktnih oddajnikov in sprejemnikov (IEC 62148-3:2010) (IEC 62148-3:2010)

Fibre optic active components and devices - Package and interface standards - Part 3: SFF 20-pin transceivers (IEC 62148-3:2010)

iTeh STANDARD PREVIEW

Aktive Lichtwellenleiterbauelemente und -geräte - Gehäuse- und Schnittstellennormen - Teil 3: SFF-Sende- und Empfangsmodule mit 20 Anschlüssen (IEC 62148-3:2010)

SIST EN 62148-3:2011

Composants et dispositifs actifs en fibres optiques Normes de boîtier et d'interface - Partie 3: Emetteurs-récepteurs SFF à 20 broches (IEC 62148-3:2010)

Ta slovenski standard je istoveten z: EN 62148-3:2011

ICS:

33.180.20 Povezovalne naprave za

optična vlakna

Fibre optic interconnecting

devices

SIST EN 62148-3:2011 en

SIST EN 62148-3:2011

iTeh STANDARD PREVIEW (standards.iteh.ai)

EUROPEAN STANDARD

EN 62148-3

NORME EUROPÉENNE EUROPÄISCHE NORM

January 2011

ICS 33.180.20

Supersedes EN 62148-3:2003, EN 62148-8:2003, EN 62148-10:2003

English version

Fibre optic active components and devices Package and interface standards Part 3: SFF 20-pin transceivers

(IEC 62148-3:2010)

Composants et dispositifs actifs en fibres optiques -

Normes de boîtier et d'interface -

Partie 3: Emetteurs-récepteurs SFF à 20

broches

(CEI 62148-3:2010)

Aktive Lichtwellenleiterbauelemente und -geräte -Gehäuse- und Schnittstellennormen -Teil 3: SFF-Sende- und Empfangsmodule mit 20 Anschlüssen (IEC 62148-3:2010)

iTeh STANDARD PREVIEW (standards.iteh.ai)

This European Standard was approved by CENELEC on 2011-01-01. 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 alternation sist/a1e22590-74c3-475e-b137-

2c1209c0ebba/sist-en-62148-3-2011

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86C/970/FDIS, future edition 2 of IEC 62148-3, 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 62148-3 on 2011-01-01.

This European Standard supersedes EN 62148-3:2003, EN 62148-8:2003 and EN 62148-10:2003.

The significant technical change with respect to EN 62148-3:2003 is that this edition includes 20-pin SFF MT-RJ/LC/MU devices.

This standard is to be read in conjunction with EN 62148-1.

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) 2011-10-01

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

(dow) 2014-01-01

Annex ZA has been added by CENELEC. NDARD PREVIEW (standards.iteh.ai)

Endorsement notice

https://standards.iteh.ai/catalog/standards/sist/a1e22590-74c3-475e-b137-

The text of the International Standard IEC 62148-3:2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60603-7 NOTE Harmonized as EN 60603-7.

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>	<u>EN/HD</u>	<u>Year</u>
IEC 61754-6	-	Fibre optic connector interfaces - Part 6: Type MU connector family	EN 61754-6	-
IEC 61754-18	-	Fibre optic connector interfaces - Part 18: Type MT-RJ connector family	EN 61754-18	-
IEC 61754-20	iT	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces A N D A R D P R F V F Part 20: Type LC connector family	EN 61754-20	-
IEC 62148-1	-	Fibre optic active components and devices - Package and interface standards - Part 1: General and guidance	EN 62148-1	-

SIST EN 62148-3:2011

iTeh STANDARD PREVIEW (standards.iteh.ai)



IEC 62148-3

Edition 2.0 2010-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Fibre optic active components and devices – Package and interface standards – Part 3: SFF 20-pin transceivers and ards.iteh.ai)

Composants et dispositifs actifs en fibres optiques – Normes de boîtier et d'interface – https://standards.itch.ai/catalog/standards/sist/a1e22590-74c3-475e-b137-Partie 3: Emetteurs-récepteurs SFF à 20 broches 011

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX

Q

ICS 33.180.20

ISBN 978-2-88912-270-7

CONTENTS

FΟ	REWORD	3			
INT	TRODUCTION	5			
1	Scope				
2	Normative references	6			
3	Terms, definitions and abbreviations	6			
	3.1 Terms and definitions	6			
	3.2 Abbreviations	6			
4	Classification	6			
5	Specification of the optical connector interface	7			
6	Electrical interface	7			
	6.1 General	7			
	6.2 Numbering of electrical terminals	7			
	6.3 Electrical terminal assignment	7			
7	Outline and footprint	8			
	7.1 Drawings of case outline	8			
	7.2 Optical receptacle				
Bib	7.3 Drawings of case footprint	15 17			
	(standards.iteh.ai)				
	gure 1 – Electrical terminal numbering assignments (viewed from above with pins derneath) <u>SIST-EN-62148-3-201-1</u>				
Fig	jure 2 - Case outline of the SEE MT-RJ/20 pin transceiver-74c3-475c-b137-	10			
Fig	gure 3 – Case outline of the SFF LC 20-pin transceiver	12			
Fig	gure 4 – Case outline of the SFF MU duplex 20-pin transceiver	14			
Fig	gure 5 – Case footprint	16			
Tal	ble 1 – Transceiver receiver pin-function definitions	7			
Tal	hle 2 – Transceiver transmitter nin-function definitions	8			

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 3: SFF 20-pin transceivers

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter
- https://standards.itch.ai/catalog/standards/sist/a1c22590-74c3-475e-b137
 5) IEC itself does not provide any attestation of conformity Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62148-3 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

This standard is to be read in conjunction with IEC 62148-1.

This second edition cancels and replaces the first edition, published in 2003, and constitutes a technical revision.

It also cancels and replaces the first edition of IEC 62148-8 and the first edition of IEC 62148-10.

The significant technical change with respect to the previous edition is that this edition includes 20-pin SFF MT-RJ/LC/MU devices.

-4 -

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

FDIS	Report on voting
86C/970/FDIS	86C/976/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 parts of the IEC 62148 series can be found, under the general title *Fibre optic active components and devices – Package and interface standards*, 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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

62148-3 © IEC:2010

- 5 -

INTRODUCTION

Fibre optic transceivers are used to convert electrical signals into optical signals and vice versa. This standard covers the physical interface for a 20-pin small form factor (SFF) transceiver. This transceiver is designed for use with the SFF MT-RJ/LC/MU duplex optical connectors and with through-hole printed circuit-board applications.

iTeh STANDARD PREVIEW (standards.iteh.ai)