
Aktivne komponente in naprave optičnih vlaken – Standardi oblike in vmesnika– 3. del: SFF MT-RJ 20 kontaktnih oddajnikov in sprejemnikov (IEC 62148-3:2003)*

Fibre optic active components and devices - Package and interface standards - Part 3: SFF MT-RJ 20-pin transceivers (IEC 62148-3:2003)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 62148-3:2004](https://standards.iteh.ai/catalog/standards/sist/6dcce6f6-f638-45e7-802a-1f056f334d13/sist-en-62148-3-2004)

<https://standards.iteh.ai/catalog/standards/sist/6dcce6f6-f638-45e7-802a-1f056f334d13/sist-en-62148-3-2004>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62148-3:2004

<https://standards.iteh.ai/catalog/standards/sist/6dcce6f6-f638-45e7-802a-1f056f334d13/sist-en-62148-3-2004>

EUROPEAN STANDARD

EN 62148-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2003

ICS 33.180.20

English version

**Fibre optic active components and devices -
Package and interface standards
Part 3: SFF MT-RJ 20-pin transceivers
(IEC 62148-3:2003)**

Composants et dispositifs actifs
en fibres optiques -
Normes de boîtier et d'interface
Partie 3: Emetteurs-récepteurs
SFF MT-RJ à 20 broches
(CEI 62148-3:2003)

Aktive Lichtwellenleiterbauelemente
und -geräte -
Gehäuse- und Schnittstellennormen
Teil 3: Sende- und Empfangsmodule
des Typs SFF MT-RJ mit 20 Anschlüssen
(IEC 62148-3:2003)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62148-3:2004

<https://standards.iteh.ai/catalog/standards/sist/6dcce6f6-f638-45e7-802a-146413441341/sist-62148-3-2004>

This European Standard was approved by CENELEC on 2003-03-01. 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 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of document 86C/488/FDIS, future edition 1 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 2003-03-01.

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) 2003-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-03-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

This standard constitutes Part 3 of the EN 62148 series, published under the general title *Fibre optic active components and devices - Package and interface standards*. This series consists of Part 1, devoted to general requirements, and various parts specific to individual module families.

- 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 fibre 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 modules

Endorsement notice

The text of the International Standard IEC 62148-3:2003 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 61754-18	- ¹⁾	Fibre optic connector interfaces Part 18: Type MT-RJ connector family	EN 61754-18 + corr. April	2002 ²⁾ 2002
IEC 62148-1	- ¹⁾	Fibre optic active components and devices - Package and interface standards Part 1: General and guidance	EN 62148-1	2002 ²⁾

ITEH STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62148-3:2004

<https://standards.iteh.ai/catalog/standards/sist/6dcce6f6-f638-45e7-802a-1f056f334d13/sist-en-62148-3-2004>

1) Undated reference.

2) Valid edition at date of issue.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62148-3:2004

<https://standards.iteh.ai/catalog/standards/sist/6dcce6f6-f638-45e7-802a-1f056f334d13/sist-en-62148-3-2004>

NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC

62148-3

Première édition
First edition
2003-02

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

**Partie 3:
Emetteurs récepteurs SFF MT-RJ à 20 broches**

(standards.iteh.ai)

**Fibre optic active components and devices –
Package and interface standards –**

**Part 3:
SFF MT-RJ 20-pin transceivers**

© IEC 2003 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

L

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

FOREWORD	5
INTRODUCTION	9
1 Scope	11
2 Normative references.....	11
3 Definition and abbreviation.....	11
3.1 Definition	11
3.2 Abbreviation	11
4 Classification	11
5 Specification of fibre optic transceiver modules.....	13
6 Electrical interface	13
6.1 General	13
6.2 Numbering of electrical terminals.....	13
6.3 Electrical terminal assignment	15
7 Outline and footprint	17
7.1 Drawings of case outline.....	17
7.2 Optical receptacle MT-RJ style.....	19
7.3 Drawings of case footprint	21
Figure 1 – Electrical terminal numbering assignments (viewed from above with pins underneath).....	13
Figure 2 – Case outline.....	19
Figure 3 – Case footprint.....	23
Table 1 – Transceiver receiver pin-function definitions	15
Table 2 – Transceiver transmitter pin-function definitions	15

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC ACTIVE COMPONENTS AND DEVICES –
PACKAGE AND INTERFACE STANDARDS –****Part 3: SFF MT-RJ 20-pin transceivers**

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The 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 the 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 National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The 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.

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

FDIS	Report on voting
86C/488/FDIS	86C/507/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.

This standard constitutes Part 3 of the IEC 62148 series, published under the general title *Fibre optic active components and devices – Package and interface standards*. This series consists of Part 1, devoted to general requirements, and various parts, specific to individual module families.

- 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