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Fibre optic active components and devices – Package and interface standards – Part 2: SFF 10-pin transceivers

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

Part 2: SFF 10-pin transceivers

FOREWORD

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IEC 62148-2 edition 2.1 contains the second edition (2010-12) [documents 86C/975/FDIS and 86C/981/RVD] and its amendment 1 (2024-11) [documents 86C/1922/CDV and 86C/1939/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 62148-2 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

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

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

With respect to the previous edition, this edition includes 10-pin SFF-LC, and SFF MU devices.

It also cancels and replaces the first edition of IEC 62148-7 and the first edition of IEC 62148-9.

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 document and its amendment will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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INTRODUCTION

Fibre optic transceivers are used to convert electrical signals into optical signals and vice versa. This standard covers the physical interface for a 10-pin small form factor (SFF) transceiver. This transceiver is designed for use with the SFF MU/MT-RJ/LC duplex optical connector and with through-hole printed circuit-board applications.

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

Part 2: SFF 10-pin transceivers

1 Scope

This part of IEC 62148 covers the physical interface specifications for the SFF MT-RJ/LC/MU duplex 10-pin fibre optic transceiver module family.

The intent of this standard is to adequately specify the physical requirements of an optical transceiver that will enable mechanical interchangeability of transceivers complying with this standard both at the printed circuit wiring board and for any panel-mounting requirement.

2 Normative references

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.

IEC 61754-6, *Fibre optic connector interfaces – Part 6: Type MU connector family*

IEC 61754-18, *Fibre optic connector interfaces – Part 18: Type MT-RJ connector family*

IEC 61754-20, *Fibre optic connector interfaces – Part 20:Type LC connector family*

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