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Optical circuit boards -
Part 4-3: Interface standards - Terminated waveguide OCB assembly using a single-row thirty-two-channel PMT connector intermateable with a 250-µm pitch MPO 16

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IEC 62496-4-3 has been prepared by IEC technical committee 86: Fibre optics. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
86/641/CDV	86/649/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 International Standard 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. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 62496 series, published under the general title *Optical circuit boards*, can be found on the IEC website.

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 in the data related to the specific document. At this date, the document will be

– reconfirmed,

– withdrawn, or

– revised.

INTRODUCTION

This document relates to the field of communications technologies and, in particular, to a high-density optical connector.

With the rapid development of the communications industry, the system capacity increasingly grows, resulting in a dramatic increase of the number of links between the backplane and the daughter cards. Therefore, the number of links for the next generation cards are greater than the current cards. One of the best ways to cut cost is to make the current cards work well in the next generation system, which means the connector of the next generation backplane should be intermateable with the connector of the current cards.

This document defines the standard interface dimensions for a terminated waveguide optical circuit board (OCB) assembly (referred to simply as "assembly") with a single-row thirty-two-channel polymer MT (PMT) connector, such a PMT connector being intermateable with the rectangular ferrule of a single-row type MPO 16 connector. The interconnection of the backplane is one of the potential applications of this PMT connector. The small pitch waveguides will enable new applications.

1 Scope

This part of IEC 62496 defines the standard interface dimensions for a terminated waveguide optical circuit board (OCB) assembly (referred to simply as "assembly") with a single-row thirty-two-channel polymer MT（PMT) connector, such a PMT being intermateable with the rectangular ferrule of a single-row type MPO 16 connector.

2 Normative references

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.

IEC 61754-5, *Fibre optic connector interfaces - Part 5: Type MT connector family*

IEC 62496-1, *Optical circuit boards - Part 1: General*

IEC 62496-4, *Optical circuit boards - Part 4: Interface standards - General and guidance*