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BSI Standards Publication

Dynamic modules

Part 6-2: Design guide — Software and hardware interfaces — Survey results



National foreword

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The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/3, Fibre optic systems and active devices.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Part 6-2: Design guide - Software and hardware interfaces - Survey results

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DYNAMIC MODULES -

Part 6-2: Design guide – Software and hardware interfaces – Survey results

FOREWORD

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The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a technical report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

IEC 62343-6-2, which is a technical report, has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2009. It constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) the survey results of the software and hardware interface of OCM have been added as Annex B, which was presented at the IEC Seattle meeting in 2010. The results are in agreement with the general conclusion of the first edition.

b) OPMON (optical performance monitor) in the body of the text has been changed to OCM (optical channel monitor) for consistency with the latest definitions.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
86C/1124/DTR	86C/1149/RVC

Full information on the voting for the approval of this technical report 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 in the IEC 62343 series, published under the general title *Dynamic modules*, can be found 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.

A bilingual version of this publication may be issued at a later date.

DYNAMIC MODULES -

Part 6-2: Design guide – Software and hardware interfaces – Survey results

1 Scope

This part of IEC 62343, which is a technical report, clarifies dynamic module interfaces, which should be standardized, based on the surveys. Annex A is a summary of survey responses by region and Annex B provides survey results specific to the optical channel monitor (OCM).

The object of this technical report is to propose a software and hardware interface standard of dynamic modules. The dynamic modules addressed are defined in the IEC 62343 series.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

None.

3 Survey outline

3.1 Survey contents

- a) Types of dynamic modules (supplier/user)
- b) Standard of the control interface which was dealt with in the past (supplier)
- c) Standard of the control interface which is planned to be offered from now on (supplier)
- d) Standard of the control interface which is requested and used (user)
- e) Comments about the standard of a typical control interface (supplier/user)
- f) Opinions about standardization of the control interface (supplier/user)

3.2 Survey conditions

a) Request to 55 companies

(81 departments: users, suppliers, representatives of suppliers)

b) Received 28 effective replies

Users: 12 companies
Suppliers: 13 companies
Both: 3 companies

c) Survey period

From September to October 2004

4 Interface definition

The layer structure of the interface of a dynamic module is shown in Figure 1. There are an optical component and two microprocessors for control, and there are three interfacing points: interface A, interface B and interface C.