



# INTERNATIONAL STANDARD

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**Dynamic modules –  
Part 3-1: Performance specification templates – Dynamic channel equalizers**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### DYNAMIC MODULES –

#### Part 3-1: Performance specification templates – Dynamic channel equalizers

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International Standard IEC 62343-3-1 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 2010. This edition constitutes a technical revision.

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

- modification of terms and definitions and references.

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

FDIS	Report on voting
86C/1370/FDIS	86C/1372/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 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 website 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- withdrawn,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.

## INTRODUCTION

A dynamic channel equalizer (DCE) is used to compensate and equalize the variations in channel power spectrum as the optical channels propagate through DWDM networks. A typical DCE module is an electrically controlled two port device, which controls the time varying power levels of multichannel input signals such that, at the output channel, powers are nominally equalized.

## DYNAMIC MODULES –

### Part 3-1: Performance specification templates – Dynamic channel equalizers

#### 1 Scope

This part of IEC 62343 provides a performance specification template for the dynamic channel equalizer (DCE). The object of this performance specification template is to provide a framework for the preparation of detail specifications on the product or performance of dynamic channel equalizers.

Additional specification parameters may be included for product specifications or performance specifications. However, specification parameters specified in this standard should not be removed from the product specifications or performance specifications.

Technical information regarding dynamic channel equalizers and their applications in DWDM systems is described in IEC TR 62343-6-1.

#### 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.

IEC 61300-2-14, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-14: Tests – High optical power*

IEC 61300-3-2, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-2: Examinations and measurements – Polarization dependent loss in a single-mode fibre optic device*

IEC 61300-3-6, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – Return loss*

IEC 61300-3-29, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-29: Examinations and measurements – Spectral transfer characteristics of DWDM devices*

IEC 61300-3-32, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-32: Examinations and measurements – Polarization mode dispersion measurement for passive optical components*

IEC 61300-3-38, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-38: Examinations and measurements – Group delay, chromatic dispersion and phase ripple*

IEC 61753-021-2, *Fibre optic interconnecting devices and passive components performance standard – Part 021-2: Grade C/3 single-mode fibre optic connectors for category C – Controlled environment*

IEC 62343, *Dynamic modules – General and guidance*

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ITU-T Recommendation G.694.1, *Spectral grids for WDM applications: DWDM frequency grid*