

## Dynamic modules - Part 2: Reliability qualification

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ICS 33.180

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English Version

**Dynamic modules - Part 2: Reliability qualification  
(IEC 62343-2:2014)**Modules dynamiques - Partie 2: Qualification de fiabilité  
(CEI 62343-2:2014)Dynamische Module - Teil 2: Beurteilung der  
Zuverlässigkeit  
(IEC 62343-2:2014)

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 86C/1185/CDV, future edition 2 of IEC 62343-2, 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 approved by CENELEC as EN 62343-2:2014.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-06-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2017-09-01

This document supersedes EN 62343-2:2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

## Endorsement notice

The text of the International Standard IEC 62343-2:2014 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61000-4-2	NOTE	Harmonized as EN 61000-4-2.
IEC 61000-4-3	NOTE	Harmonized as EN 61000-4-3.
IEC 61000-4-4	NOTE	Harmonized as EN 61000-4-4.
IEC 61000-4-5	NOTE	Harmonized as EN 61000-4-5.
IEC 61000-4-6	NOTE	Harmonized as EN 61000-4-6.
IEC 61291-5-2	NOTE	Harmonized as EN 61291-5-2.
IEC 61300-2-5	NOTE	Harmonized as EN 61300-2-5.
IEC 61300-2-9	NOTE	Harmonized as EN 61300-2-9.
IEC 61300-2-42	NOTE	Harmonized as EN 61300-2-42.
IEC 61300-2-44	NOTE	Harmonized as EN 61300-2-44.
IEC 61753-1	NOTE	Harmonized as EN 61753-1.
CISPR 22	NOTE	Harmonized as EN 55022.

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## DYNAMIC MODULES –

### Part 2: Reliability qualification

#### 1 Scope

This part of IEC 62343 applies to dynamic modules and devices (DMs) which are commercially available. Examples are tuneable chromatic dispersion compensators, wavelength selective switches and optical channel monitors.

Optical amplifiers are not included in this list, but are treated in IEC 61291-5-2.

For reliability qualification purposes, some information about the internal components, parts and interconnections is needed; these internal parts are treated as black boxes. This standard gives requirements for the evaluation of DM reliability by combining the reliability of such internal black boxes.

The objectives of this standard are the following:

- to specify the requirements for the reliability qualification of DMs;
- to give the minimum list of reliability qualification tests, requirements on failure criteria during testing and on reliability predictions, and give the relevant normative references.

#### 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 61300-2-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-1: Tests – Vibration (sinusoidal)*

IEC 61300-2-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-4: Tests – Fibre/cable retention*

IEC 61300-2-12, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-12: Tests – Impact*

IEC 62005-9-1, *Fibre optic interconnecting devices and passive components – Reliability – Part 9-1: Qualification of passive optical components*<sup>1</sup>

IEC 62005-9-2, *Reliability of fibre optic interconnecting devices and passive optical components – Part 9-2: Reliability qualification for single fibre optic connector sets – Single mode*

IEC 62572 (all parts), *Fibre optic active components and devices – Reliability standards*

ISO 9000: *Quality management systems – Fundamentals and vocabulary*

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<sup>1</sup> To be published.