

Dynamic modules - Part 3-3: Performance specification templates - Wavelength selective switches

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN IEC 62343-3-3:2020 sisaldab Euroopa standardi EN IEC 62343-3-3:2020 ingliskeelset teksti.	This Estonian standard EVS-EN IEC 62343-3-3:2020 consists of the English text of the European standard EN IEC 62343-3-3:2020.
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ICS 33.180.20

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EUROPEAN STANDARD

EN IEC 62343-3-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 33.180.20

Supersedes EN 62343-3-3:2014 and all of its amendments and corrigenda (if any)

English Version

**Dynamic modules - Part 3-3: Performance specification
templates - Wavelength selective switches
(IEC 62343-3-3:2020)**

Modules dynamiques - Partie 3-3: Modèles de spécification
de performance - Commutateurs sélectifs en longueur
d'onde
(IEC 62343-3-3:2020)

Dynamische Module - Teil 3-3: Vorlagen für
Leistungsspezifikationen - Wellenlängenselektive Schalter
(IEC 62343-3-3:2020)

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European foreword

The text of document 86C/1648/FDIS, future edition 2 of IEC 62343-3-3, 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 IEC 62343-3-3:2020.

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) 2021-02-14
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-14

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

IEC 60793-2-50	NOTE	Harmonized as EN IEC 60793-2-50
IEC 60869-1	NOTE	Harmonized as EN IEC 60869-1
IEC 60876-1	NOTE	Harmonized as EN 60876-1
IEC 61300 (series)	NOTE	Harmonized as EN 61300 (series)
IEC 61300-3-4	NOTE	Harmonized as EN 61300-3-4
IEC 61300-3-20	NOTE	Harmonized as EN 61300-3-20
IEC 61753-081-2	NOTE	Harmonized as EN 61753-081-2
IEC 61753-083-2:2007	NOTE	Harmonized as EN 61753-083-2:2008 (not modified)
IEC 61753-084-2:2007	NOTE	Harmonized as EN 61753-084-2:2008 (not modified)
IEC 61753-1	NOTE	Harmonized as EN IEC 61753-1
IEC 61754 (series)	NOTE	Harmonized as EN 61754 (series)
IEC 61978-1	NOTE	Harmonized as EN 61978-1
IEC 62343-4-1	NOTE	Harmonized as EN 62343-4-1

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61290-7-1	-	Optical amplifiers - Test methods - Part 7-1: Out-of-band insertion losses - Filtered optical power meter method	EN 61290-7-1	-
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: Examination and measurements - Polarization dependent loss in a single-mode fibre optic device	EN 61300-3-2	-
IEC 61300-3-6	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-6: Examinations and measurements - Return loss	EN 61300-3-6	-
IEC 61300-3-14	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-14: Examinations and measurements - Error and repeatability of the attenuation settings of a variable optical attenuator	EN 61300-3-14	-
IEC 61300-3-21	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-21: Examinations and measurements - Switching time	EN IEC 61300-3-21	-

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	EN 61300-3-29	-
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	EN 61300-3-32	-
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	EN 61300-3-38	-
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	EN 61753-021-2	-
IEC 62074-1	-	Fibre optic interconnecting devices and passive components - Fibre optic WDM devices - Part 1: Generic specification	EN 62074-1	-
IEC 62343	-	Dynamic modules - General and guidance	EN 62343	-
IEC 62343-1	-	Dynamic modules - Part 1: Performance standards - General conditions	EN IEC 62343-1	-
IEC 62343-5-2	-	Dynamic modules - Part 5-2: Test methods - 1 x N fixed-grid WSS - Dynamic crosstalk measurement	EN IEC 62343-5-2	-
ITU-T G.694-1	-	Spectral grids for WDM applications: DWDM frequency grid	-	-

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Dynamic modules –
Part 3-3: Performance specification templates – Wavelength selective switches**

**Modules dynamiques –
Partie 3-3: Modèles de spécification de performance – Commutateurs sélectifs
en longueur d'onde**



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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 33.180.20

ISBN 978-2-8322-8107-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DYNAMIC MODULES –**Part 3-3: Performance specification templates –
Wavelength selective switches****FOREWORD**

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International Standard IEC 62343-3-3 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 2014. This edition constitutes a technical revision.

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

- a) modification of the normative references;
- b) modification of the terms and definitions.

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

FDIS	Report on voting
86C/1648/FDIS	86C/1655/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document 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 document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

A wavelength selective switch (WSS) is a dynamic module (DM), which is mainly used in a reconfigurable optical add-drop multiplexer (ROADM) system to switch a particular wavelength signal to any output ports in DWDM networks. The WSS has one input port and a plurality of output ports (i.e. $1 \times N$ WSS) and can be used in reverse, with N input ports and one output port, depending on its application. It is controlled with software, which determines any wavelength signal among a DWDM signal from one input port to switch to a particular output port in case of $1 \times N$ application.

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