

INTERNATIONAL STANDARD

AMENDMENT 1

Information technology – Generic cabling – Industrial premises

(<https://standards.iteh.ai>)
Document Preview

ISO/IEC 24702:2006/AMD1:2009

<https://standards.iteh.ai/catalog/standards/iec/944c7959-2fae-4a59-81ac-95fdd815603f/iso-iec-24702-2006-amd1-2009>

WITHDRAWN



THIS PUBLICATION IS COPYRIGHT PROTECTED
Copyright © 2009 ISO/IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester.

If you have any questions about ISO/IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland
Email: inmail@iec.ch
Web: www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

- Catalogue of IEC publications: www.iec.ch/searchpub

The IEC on-line Catalogue enables you to search by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, withdrawn and replaced publications

- IEC Just Published: www.iec.ch/online_news/justpub

Stay up to date on all new IEC publications. Just Published details twice a month all new publications released. Available on-line and also by email.

- Electropedia: www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing more than 20 000 terms and definitions in English and French, with equivalent terms in additional languages. Also known as the International Electrotechnical Vocabulary online.

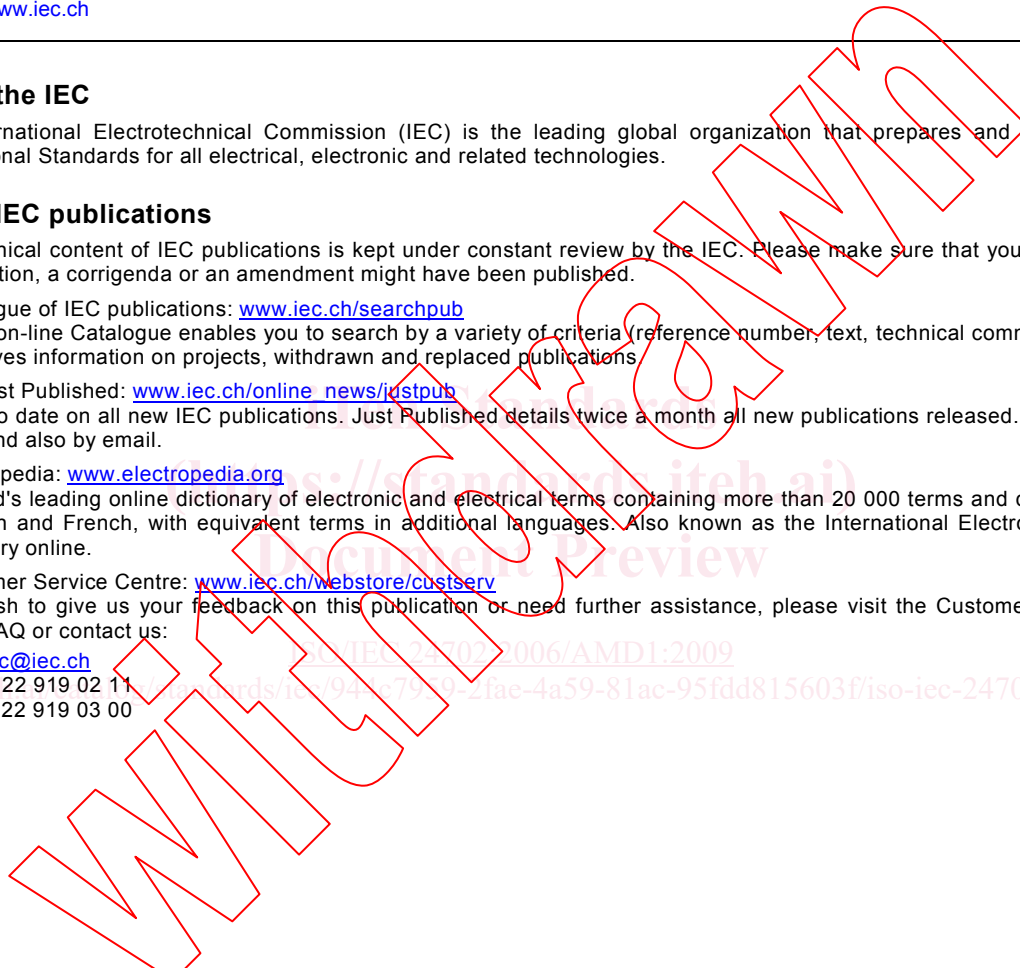
- Customer Service Centre: www.iec.ch/webstore/custserv

If you wish to give us your feedback on this publication or need further assistance, please visit the Customer Service Centre FAQ or contact us:

Email: csc@iec.ch

Tel.: +41 22 919 02 11

Fax: +41 22 919 03 00



INTERNATIONAL STANDARD

AMENDMENT 1

Information technology – Generic cabling – Industrial premises

(<https://standards.iteh.ai>)
Document Preview

ISO/IEC 24702:2006/AMD1:2009

<https://standards.iteh.ai/catalog/standards/iec/944c7929-2fae-4a59-81ac-95fdd815603f/iso-iec-24702-2006-amd1-2009>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

PRICE CODE

C

FOREWORD

Amendment 1 to International Standard ISO/IEC 24702 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

6.2.2 Environmental classification

Replace the second paragraph of this subclause by the following new text.

Certain environments (e.g. nuclear, chemical, fire, explosive, damage risk from animals, salt mist) demand additional requirements beyond those of this clause. Further details on specific environments are given in ISO/IEC TR 29106.

Table 2 – Details of environmental classification

Replace the row starting with EFT/B (comms) by the following new row:

EFT/B (comms)	500 V	500 V	1 000 V
---------------	-------	-------	---------

6.3.3.1 General

Replace the second and third paragraphs including all the bullet points by the following:

This International Standard uses the optical fibre cabling channel Classes of clause 8 of ISO/IEC 11801 (2002), that is:

- Class OF-300 channels support applications listed in Annex E using cabled all-silica optical fibres in accordance with 8.4.1 to a minimum of 300 m;
- Class OF-500 channels support applications listed in Annex E using cabled all-silica optical fibres in accordance with 8.4.1 to a minimum of 500 m;
- Class OF-2000 channels support applications listed in Annex E using cabled all-silica optical fibres in accordance with 8.4.1 to a minimum of 2 000 m.

In addition, this standard specifies the following Classes for optical fibre cabling channels:

- Class OF-25 channels support applications listed in Annex E using cabled plastic optical fibre in accordance with 8.4.2 to a minimum of 25 m;
- Class OF-50 channels support applications listed in Annex E using cabled plastic optical fibre in accordance with 8.4.2 to a minimum of 50 m;
- Class OF-100 channels support applications listed in Annex E using cabled plastic or plastic clad silica optical fibres in accordance with 8.4.2 and 8.4.3 respectively to a minimum of 100 m;
- Class OF-200 channels support applications listed in Annex E using cabled plastic or plastic clad silica optical fibres in accordance with 8.4.2 and 8.4.3 respectively to a minimum of 200 m;
- Class OF-5000 channels support applications listed in Annex E using cabled all-silica optical fibres in accordance with 8.4.1 to a minimum of 5 000 m;

- Class OF-10000 channels support applications listed in Annex E using cabled all-silica optical fibres in accordance with 8.4.1 to a minimum of 10 000 m.

Table 9 Channel attenuation of optical fibre cabling channels

Replace Table 9 by the following new Table 9:

Class	Cabled optical fibre Category	Maximum channel attenuation dB			
		650 nm	850 nm	1 300 nm	1 550 nm
OF-25	OP1 (see Note 1)	7,5	-	-	-
OF-50	OP1 (see Note 1)	12,0	-	-	-
OF-100	OP2	13,0	6,3	6,3	-
	OH1	-	4,0	-	-
OF-200	OP2	23,0	9,6	9,6	-
	OH1	-	5,0	-	-
OF-300	OM1, OM2, OM3, OS1, OS2	As per ISO 11801			
OF-500	OM1, OM2, OM3, OS1, OS2				
OF-2000	OM1, OM2, OM3, OS1, OS2				
OF-5000	OS2	-	-	4,0 (see Note 2)	4,0
OF-10000	OS2	-	-	6,0 (see Note 2)	6,0
NOTE 1 The modal conditions under which the measurement is made are ffs.					
NOTE 2 For singlemode channels the nominal wavelength is 1 310 nm.					

7.3.1 General

Replace the two paragraphs of this subclause by the following new paragraphs:

Optical fibre channels shall be comprised of components that comply with Clauses 8, 9 and 10. These clauses specify physical construction (core/cladding diameter and numerical aperture) and transmission performance. Within the reference implementations of this clause, the cabled optical fibres used in each cabling channel shall have the same specification.

When more than one physical construction or cabled optical fibre Category is used in a cabling subsystem the cabling shall be marked to allow each cabling type to be clearly identified.

Table 10 – Optical fibre channel length equivalence for connecting hardware

Replace Table 10 by the following new Table 10:

Cabled optical fibre Category	Applicable channel Class	Channel length differential m					
		Wavelength	650 nm	850 nm	1 300 nm	1 310 nm	1 550 nm
OP1	OF-25, OF-50	Mated connection	8,3	–	–	–	–
		Splice	–	–	–	–	–
OP2	OF-25, OF50, OF-100, OF-200	Mated connection	15,0	46,0	46,0	–	–
		Splice	–	–	–	–	–
OH1	OF-100, OF-200	Mated connection	–	150,0	–	–	–
		Splice	–	–	–	–	–
OM1/OM2/ OM3	OF-300, OF-500, OF-2000	Mated connection	–	214,0	500,0	–	–
		Splice	–	86,0	200,0	–	–
OS1	OF-300, OF-500, OF-2000	Mated connection	–	–	–	750,0	750,0
		Splice	–	–	–	300,0	300,0
OS2	OF-300, OF-500, OF-2000, OF-5000, OF-10000	Mated connection	–	–	–	1 875,0	1 875,0
		Splice	–	–	–	750,0	750,0

8.4.1 All-silica optical fibre cables

Replace the first three paragraphs and Table 12 by the following three paragraphs and Table:

Cabled multimode optical fibres shall meet the requirements of Categories OM1, OM2 or OM3 cable referenced in ISO/IEC 11801 as appropriate in conjunction with a completed detail specification based upon those within IEC 60794-2 or IEC 60794-3, as appropriate.

Cabled singlemode optical fibres shall meet the requirements of Category OS1 specified in ISO/IEC 11801 or Category OS2 specified in Table 12 as appropriate in conjunction with a completed detail specification based upon those within IEC 60794-2 or IEC 60794-3, as appropriate.

Detail specifications based upon the blank detail specifications within IEC 60794-2 or IEC 60794-3 shall be used to specify cable performance requirements under the environmental classifications of Table 2. Table 13 shows the elements of Table 2 that are not covered by these blank detail specifications and which have to be specified separately.