



NSAI
Standards

Irish Standard
I.S. EN 50407-3:2014

Multi-pair cables used in high bit rate digital access telecommunications networks - Part 3: Indoor multi-pair/quad riser cables up to 100 MHz for maximum length of connection 100 m supporting universal services, xDSL and applications up to 100 Mbit/s over IP

I.S. EN 50407-3:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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EUROPEAN STANDARD

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English Version

**Multi-pair cables used in high bit rate digital access
telecommunications networks - Part 3: Indoor multi-pair/quad
riser cables up to 100 MHz for maximum length of connection
100 m supporting universal services, xDSL and applications up
to 100 Mbit/s over IP**

Câbles multi-paires de l'utilisateur final utilisés dans les réseaux d'accès numériques de télécommunication à haut-débits - Partie 3 : Câbles intérieurs multi paires/quartes pour colonne de communication, performants jusqu'à 100 MHz, de longueur maximale de connexion de 100 m, supportant le service universel, le xDSL et les applications jusqu'à 100 Mbits sur IP

Vielpaarige Kabel für digitale Telekommunikationsnetzwerke mit hoher Bitrate - Teil 3: Vielpaarige-/vierer-Steigekabel im Innenbereich bis 100 MHz über eine maximale Verbindungslänge von 100 m für universelle Dienste, xDSL und Anwendungen bis zu 100 Mbit/s über Internetprotokoll (IP)

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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

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Foreword

This document (EN 50407-3:2014) has been prepared by CLC/SC 46XC “Multicore, multipair and quad data communication cables”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2015-03-10
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2017-03-10

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

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.

1 Scope

This European Standard defines indoor multi-pair/quad cables for installation in Multi Dwelling units shaft supporting universal services, xDSL and applications up to 100 Mbits over IP, their relative definitions and requirements.

NOTE Higher bit rate applications need cables specified in a relevant part of EN 50406 or EN 50288 series.

It covers cables, with an overall screen, with performances up to 100 MHz, to be used in indoor networks intended to connect the broadband outside plant to the individual customer dwelling for applications 100 Mbit/s over IP maximum length of connection 100 m.

The electrical, environmental, mechanical and transmission performance characteristics of the cables, related to their reference test methods, are detailed.

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.

EN 10002-1, *Metallic materials - Tensile testing - Part 1: Method of test at ambient temperature*

EN 50289 (all parts), *Communication cables - Specifications for test methods (Basic reference standards)*

EN 50290 (all parts), *Communication cables (Basic reference standards)*

EN 60811-201, *Insulating and sheathing materials of electric and optical cables – Common test methods – Part 1-1: General application - Measurement of thickness and overall dimensions - Tests for determining the mechanical properties (IEC 60811-201)*

HD 402, *Standard colours for insulation for low-frequency cables and wires (IEC 60304)*

IEC 60028, *International standard of resistance for copper*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions of EN 50290-1-2:2004 apply.

3.2 Abbreviations

For the purposes of this document, the following abbreviations apply.

ADSL	Asymmetric Digital Subscriber Lines
ATM	Asynchronous Transfer Mode
DSL	Digital Subscriber Line
EMC	Electromagnetic Compatibility

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