



**NSAI**  
Standards

Irish Standard  
I.S. EN 50117-2-1:2005

Coaxial cables -- Part 2-1: Sectional specification for cables used in cabled distribution networks - Indoor drop cables for systems operating at 5 MHz - 1 000 MHz

## I.S. EN 50117-2-1:2005

*Incorporating amendments/corrigenda issued since publication:*

EN 50117-2-1:2005/A1:2008  
EN 50117-2-1:2005/A2:2013

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English version

**Coaxial cables -  
Part 2-1: Sectional specification for cables used in cabled distribution  
networks -  
Indoor drop cables for systems operating at 5 MHz -  
1 000 MHz**

Câbles coaxiaux -  
Partie 2-1: Spécification intermédiaire  
pour câbles utilisés dans les réseaux de  
distribution par câbles -  
Câbles intérieurs de raccordement pour  
les réseaux fonctionnant à 5 MHz -  
1 000 MHz

Koaxialkabel -  
Teil 2-1: Rahmenspezifikation für Kabel  
für Kabelverteilanlagen -  
Hausinstallationskabel im Bereich von 5  
MHz -  
1 000 MHz

This amendment A2 modifies the European Standard EN 50117-2-1:2005; it was approved by CENELEC on 2013-07-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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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 50117-2-1:2005/A2:2013) has been prepared by CLC/SC 46XA "Coaxial cables" of CLC/TC 46X "Communication cables".

The following dates are fixed:

- latest date by which this document has to be implemented at (dop) 2014-07-01  
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this document have to be withdrawn

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.

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

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English version

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used in cabled distribution networks -  
Indoor drop cables for systems operating at 5 MHz - 1 000 MHz**

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Teil 2-1: Rahmenspezifikation  
für Kabel für Kabelverteilanlagen -  
Hausinstallationskabel im Bereich  
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Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## **Foreword**

This amendment to the European Standard EN 50117-2-1:2005 was prepared by SC 46XA, Coaxial cables, of Technical Committee CENELEC TC 46X, Communication cables.

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EUROPEAN STANDARD

**EN 50117-2-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2005

ICS 33.120.10

Supersedes EN 50117-2-1:2002

English version

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**in cabled distribution networks –**  
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This European Standard was approved by CENELEC on 2005-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**



## **Foreword**

This European Standard was prepared by SC 46XA, Coaxial cables, of the Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50117-2-1 on 2005-03-01.

This European Standard supersedes EN 50117-2-1:2002.

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## 1 Scope

This sectional specification relates to EN 50117-1: Generic specification for coaxial cables, and should be read in conjunction with this generic standard. This specification applies to indoor drop cables for use in cabled distribution systems operating at temperature between  $-40\text{ °C}$  and  $+70\text{ °C}$ <sup>1)</sup> and at frequencies between 5 MHz and 1 000 MHz and complying with the requirements of EN 50083.

The purpose of this European Standard is to specify the applicable test methods and requirements for the electrical, mechanical, environmental and fire performance of the cables.

## 2 Normative references

The following referenced documents are indispensable for the application 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.

EN 50083 series	Cable networks for television signals, sound signals and interactive services
EN 50117-1	Coaxial cables – Part 1: Generic specification
EN 50290-1-2	Communication cables – Part 1-2: Definitions
EN 50290-2-23	Communication cables – Part 2-23: Common design rules and construction – PE insulation
EN 50290-2-24	Communication cables – Part 2-24: Common design rules and construction – PE sheathing
EN 50290-2-25	Communication cables – Part 2-25: Common design rules and construction – Polypropylene insulation compounds
EN 50290-2-27	Communication cables – Part 2-27: Common design rules and construction – Halogen free flame retardant thermoplastic sheathing compounds
EN 50290-4-1	Communication cables – Part 4-1: General considerations for the use of cables – Environmental conditions and safety aspects
EN 62153-1-1	Metallic telecommunication cables test methods – Part 1-1:Electrical measurement of the pulse/step return loss from measurement in the frequency domain using the Inverse Discrete Fourier Transformation (IDFT) (IEC 62153-1-1)
IEC 61196-1-115 <sup>2)</sup>	Coaxial communication cables – Part 1-115: Electrical test methods – Pulse return loss

## 3 Definitions

For the purposes of this European Standard, the definitions of EN 50290-1-2 and EN 50117-1 apply.

## 4 Requirements for cable construction

### 4.1 General

Designing the cable, consideration should be paid to the maximum admissible current stated in the detail specification. It is assumed that the raise of temperature of the inner conductor when submitted to the maximum current under nominal ambient conditions does not affect the mechanical and electrical properties of the cable (details are under study).

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<sup>1)</sup> This value is valid for applications without ampacity only.

<sup>2)</sup> At draft stage.

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