

FINAL VERSION

VERSION FINALE



**Digital addressable lighting interface –
Part 103: General requirements – Control device**

**Interface d'éclairage adressable numérique –
Partie 103: Exigences générales – Dispositifs de commande**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

**Part 103: General requirements –
Control devices**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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This Consolidated version of IEC 62386-103 bears the edition number 1.1. It consists of the first edition (2014-11) [documents 34C/1100/FDIS and 34C/1113/RVD] and its amendment 1 (2018-09) [documents 34/524/FDIS and 34/535/RVD]. The technical content is identical to the base edition and its amendment.

This Final version does not show where the technical content is modified by amendment 1. A separate Redline version with all changes highlighted is available in this publication.

International Standard IEC 62386-103 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 103 is intended to be used in conjunction with Part 101, which contains general requirements for the relevant product type (system), and with the appropriate Parts 3xx (particular requirements for control devices) containing clauses to supplement or modify the corresponding clauses in Parts 101 and 103 in order to provide the relevant requirements for each type of product.

A list of all parts of the IEC 62386 series, under the general title: *Digital addressable lighting interface*, can be found on the IEC website.

The committee has decided that the contents of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

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INTRODUCTION

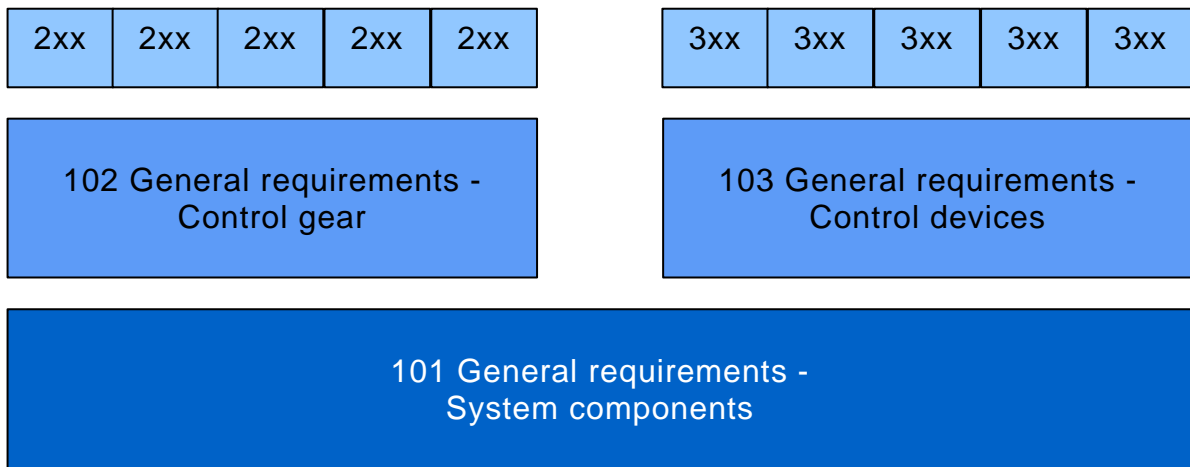
IEC 62386 contains several parts, referred to as series. The 1xx series includes the basic specifications. Part 101 contains general requirements for system components, Part 102 extends this information with general requirements for control gear and Part 103 extends it further with general requirements for control devices.

The 2xx parts extend the general requirements for control gear with lamp specific extensions (mainly for backward compatibility with Edition 1 of IEC 62386) and with control gear specific features.

The 3xx parts extend the general requirements for control devices with input device specific extensions describing the instance types as well as some common features that can be combined with multiple instance types.

This first edition of IEC 62386-103 is intended to be used in conjunction with IEC 62386-101:2014, IEC 62386-101:2014/AMD1:2018, IEC 62386-102:2014, IEC 62386-102:2014/AMD1:2018 and with the various parts that make up the IEC 62386-2xx series for control gear, together with the various parts that make up the IEC 62386-3xx series of particular requirements for control devices. The division into separately published parts provides for ease of future amendments and revisions. Additional requirements will be added as and when a need for them is recognised.

The setup of the standard is graphically represented in Figure 1 below



IEC

Figure 1 - IEC 62386 graphical overview

When this part of IEC 62386 refers to any of the clauses of the other two parts of the IEC 62386-1xx series, the extent to which such a clause is applicable and the order in which the tests are to be performed are specified. The other parts also include additional requirements, as necessary.

All numbers used in this International Standard are decimal numbers unless otherwise noted.

Hexadecimal numbers are given in the format 0xVV, where VV is the value. Binary numbers are given in the format XXXXXXXXb or in the format XXXX XXXX, where X is 0 or 1, "x" in binary numbers means "don't care".

The following typographic expressions are used:

Variables: *variableName* or *variableName[3:0]*, giving only bits 3 to 0 of *variableName*.

Range of values: [lowest, highest]

Command: "COMMAND NAME"

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 103: General requirements – Control devices

1 Scope

This Part of IEC 62386 is applicable to control devices in a bus system for control by digital signals of electronic lighting equipment which is in line with the requirements of IEC 61347 (all parts), with the addition of DC supplies.

NOTE Tests in this standard are type tests. Requirements for testing individual products during production are not included.

2 Normative references

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.

IEC 62386-101:2014, *Digital addressable lighting interface – Part 101: General requirements – System components*
IEC 62386-101:2014/AMD1:2018

IEC 62386-102:2014, *Digital addressable lighting interface – Part 102: General requirements – Control gear*
IEC 62386-102:2014/AMD1:2018

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62386-101 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

broadcast

type of address used to address all control devices in the system at once

3.2

broadcast unaddressed

type of address used to address all control devices in the system that have no short address at once

3.3

device command

command which addresses the control device and has a value of 0xFE in the instance byte of the command frame