

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Digital addressable lighting interface –  
Part 104: General requirements – Wireless and alternative wired system  
components**

**Interface d'éclairage adressable numérique –  
Partie 104 : Exigences générales – Composants de système à connexion  
alternative ou sans fil**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### DIGITAL ADDRESSABLE LIGHTING INTERFACE –

#### Part 104: General requirements – Wireless and alternative wired system components

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**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.**

International Standard IEC 62386-104 has been prepared by IEC technical committee 34: Lamps and related equipment.

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

This Part 104 of IEC 62386 is intended to be used in conjunction with:

- Part 101, which contains general requirements for system components;
- Part 102, which contains general requirements for the relevant product type (control gear), and with the appropriate Parts 2xx (particular requirements for control gear);
- Part 103, which contains general requirements for the relevant product type (control devices), and the appropriate Parts 3xx (particular requirements for control devices).

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

The committee has decided that the contents of this document and its amendment will remain unchanged until the stability date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

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## INTRODUCTION

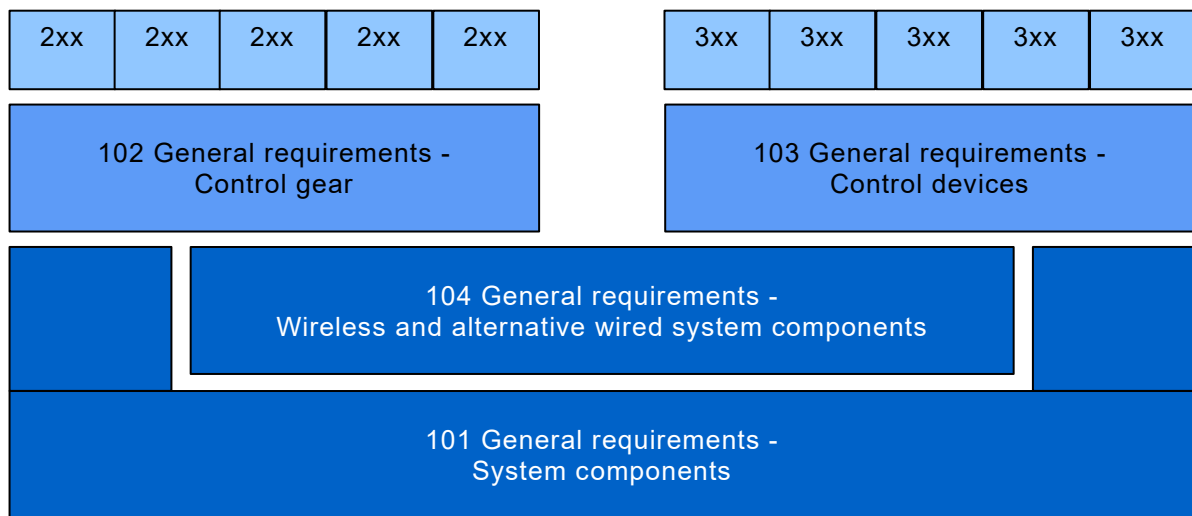
IEC 62386 contains several parts, referred to as series. The IEC 62386-1xx series includes the basic specifications. Part 101 contains general requirements for system components, Part 102 extends this information with general requirements for control gear and Part 103 extends it further with general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

The IEC 62386-2xx series extends 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 IEC 62386-3xx series extends 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 62386-104 is intended to be used in conjunction with IEC 62386-101, IEC 62386-102 and the various parts that make up the IEC 62386-2xx series for control gear, and with IEC 62386-103 and 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 standards is graphically represented in Figure 1.



IEC

**Figure 1 – IEC 62386 graphical overview**

When this part of IEC 62386 refers to any of the clauses of the other 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 document 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 104: General requirements –

### Wireless and alternative wired system components

## 1 Scope

The IEC 62386 series specifies a bus system for control by digital signals of electronic lighting equipment. This part of IEC 62386 applies to a system with wireless or alternative wired communication between its units, instead of a wired bus system, where the meaning of “wireless or alternative wired communication”, or in short “telecommunication”, is any type of communication network different from the wired system described in IEC 62386-101.

Where the electronic lighting equipment is covered by the scope of IEC 61347 (all parts), it is in line with the requirements of IEC 61347 (all parts), with the addition of DC supplies.

NOTE the definition of “telecommunication” applies only to this document and differs from the IEC Electropedia term in IEC 60050-701:1988, 701-01-05.

## 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

IEC 62386-103:2014, *Digital addressable lighting interface – Part 103: General requirements – Control devices*  
IEC 62386-103:2014/AMD1:2018

Bluetooth® Specification – Mesh Protocol<sup>1</sup>, available at <https://www.bluetooth.com/>

Bluetooth® Document – Assigned Numbers, available at <https://www.bluetooth.com/>

## 3 Terms and definitions

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

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