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Digital addressable lighting interface - Part 306: Particular requirements - Input devices - General purpose sensor

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/24

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62386-306

January 2024

ICS 29.140.50; 29.140.99

English Version

Digital addressable lighting interface - Part 306: Particular requirements - Input devices - General purpose sensor (IEC 62386-306:2023)

Interface d'éclairage adressable numérique - Partie 306 : Exigences particulières - Dispositifs d'entrée - Capteur à usage général
(IEC 62386-306:2023)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 306: Besondere Anforderungen - Eingabegeräte - Sensor für allgemeine Zwecke
(IEC 62386-306:2023)

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Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN IEC 62386-306:2024 E

European foreword

The text of document 34/1132/FDIS, future edition 1 of IEC 62386-306, prepared by IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62386-306:2024.

The following dates are fixed:

•	latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop) 2024-10-10
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2027-01-10

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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Endorsement notice

The text of the International Standard IEC 62386-306:2023 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 62386-101	2022	Digital addressable lighting interface - Part 101: General requirements - System components	EN IEC 62386-101	2022
IEC 62386-103	2022	Digital addressable lighting interface - Part 103: General requirements - Control devices	EN IEC 62386-103	2022
IEC 62386-333	2018	Digital addressable lighting interface - Part 333: Particular requirements for control devices - Manual configuration (feature type 33)	EN IEC 62386-333	2018

IEC 62386-306

Edition 1.0 2023-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Digital addressable lighting interface – Part 306: Particular requirements – Input devices – General purpose sensor

Interface d'éclairage adressable numérique – Partie 306: Exigences particulières – Dispositifs d'entrée – Capteur à usage général

IEC 62386-306:2023-12(en-fr)

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Digital addressable lighting interface – Part 306: Particular requirements – Input devices – General purpose sensor

Interface d'éclairage adressable numérique – Partie 306: Exigences particulières – Dispositifs d'entrée – Capteur à usage général

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 306: Particular requirements – Input devices – General purpose sensor

FOREWORD

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IEC 62386-306 has been prepared by IEC technical committee 34: Lighting. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
34/1132/FDIS	34/1146/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This document is intended to be used in conjunction with:

- IEC 62386-101, which contains general requirements for system components;
- IEC 62386-103, which contains general 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 will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

IMPORTANT – The "colour inside" logo on the cover page of this document indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

The IEC 62386 series specifies a bus system for control by digital signals of electronic lighting equipment and contains several parts, referred to as series. The IEC 62386-1xx series includes the basic specifications. IEC 62386-101 contains general requirements for system components, IEC 62386-102 extends this information with general requirements for control gear and IEC 62386-103 extends it further with general requirements for control devices. IEC 62386-104 and IEC 62386-105 can be applied to control gear or control devices. IEC 62386-104 gives requirements for wireless and alternative wired system components. IEC 62386-105 describes firmware transfer. IEC 62386-150 gives requirements for an auxiliary power supply which can be stand-alone, or built into control gear or 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 62386-306 is intended to be used in conjunction with IEC 62386-101 and IEC 62386-103. 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 recognized.

The setup of the standards is graphically represented in Figure 1 below.

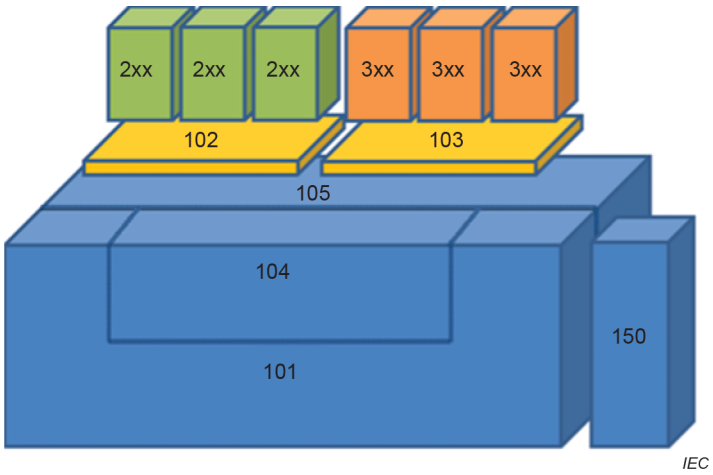

Figure 1 – IEC 62386 graphical overview

When this part of IEC 62386 refers to any of the clauses of the parts of the IEC 62386-1xx series, the extent to which such a clause is applicable is 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". Where a variable is referred by a bit number, bit 0 is the least significant bit.

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 306: Particular requirements – Input devices – General purpose sensor

1 Scope

This part of IEC 62386 is applicable to input devices that provide sensor information or measurements to the lighting control system.

This document is only applicable to input devices complying with IEC 62386-103.

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 62386-101:2022, *Digital addressable lighting interface – Part 101: General requirements – System components*

IEC 62386-103:2022, *Digital addressable lighting interface – Part 103: General requirements – Control devices*

IEC 62386-333:2018, *Digital addressable lighting interface – Part 333: Particular requirements for control devices – Manual configuration (feature type 33)*