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**Digital addressable lighting interface -  
Part 304: Particular requirements - Input devices -  
Light sensor (IEC 62386-304:2017 +  
IEC 62386-304:2017/AMD1:2024)**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 62386-304:2017+A1:2024 sisaldab Euroopa standardi EN 62386-304:2017 ja selle muudatuse A1:2024 ingliskeelset teksti.	This Estonian standard EVS-EN 62386-304:2017+A1:2024 consists of the English text of the European standard EN 62386-304:2017 and its amendment A1:2024.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.  Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.09.2017, muudatus A1 24.05.2024.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.  Date of Availability of the European standard is 15.09.2017, for A1 24.05.2024.
Muudatusega A1 lisatud või muudetud teksti algus ja lõpp on tekstis tähistatud sümbolitega $\boxed{A_1}$ $\langle A_1 \rangle$ .  Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.	The start and finish of text introduced or altered by amendment A1 is indicated in the text by tags $\boxed{A_1}$ $\langle A_1 \rangle$ .  The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 29.140.50; 29.140.99

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English Version

Digital addressable lighting interface -  
Part 304: Particular requirements - Input devices -  
Light sensor  
(IEC 62386-304:2017 + IEC 62386-304:2017/AMD1:2024)

Interface d'éclairage adressable numérique -  
Partie 304: Exigences particulières - Dispositifs d'entrée -  
Capteur de luminosité  
(IEC 62386-304:2017 + IEC 62386-304:2017/AMD1:2024)

Digital adressierbare Schnittstelle für die Beleuchtung -  
Teil 304: Besondere Anforderungen - Eingabegeräte -  
Lichtsensor  
(IEC 62386-304:2017 + IEC 62386-304:2017/AMD1:2024)

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

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

## European foreword

The text of document 34C/1314/FDIS, future edition 1 of IEC 62386-304, prepared by SC 34C "Auxiliaries for lamps", of IEC/TC 34 "Lamps and related equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62386-304:2017.

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) 2018-03-23
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2020-06-23

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The text of the International Standard IEC 62386-304:2017 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61347	NOTE	Harmonized in EN 61347 series.
IEC 61347-1	NOTE	Harmonized as EN 61347-1.

## **A1** Amendment A1 European foreword

The text of document 34/1014/CDV, future IEC 62386-304/AMD1, prepared by IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62386-304:2017/A1:2024.

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) 2025-02-15
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# INTERNATIONAL STANDARD



**Digital addressable lighting interface –  
Part 304: Particular requirements – Input devices – Light sensor**



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IEC 62386-304

Edition 1.1 2024-04  
CONSOLIDATED VERSION

# INTERNATIONAL STANDARD



**Digital addressable lighting interface –  
Part 304: Particular requirements – Input devices – Light sensor**

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ELECTROTECHNICAL  
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**DIGITAL ADDRESSABLE LIGHTING INTERFACE –****Part 304: Particular requirements – Input devices –  
Light sensor****FOREWORD**

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International Standard IEC 62386-304 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

The text of this standard is based on the following documents:

FDIS	Report on voting
34C/1314/FDIS	34C/1334/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

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

This Part 304 of IEC 62386 is intended to be used in conjunction with:

- Part 101, which contains general requirements for system components;
- Part 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.

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## Amendment A1 FOREWORD

Amendment 1 to IEC 62386-304:2017 has been prepared by IEC technical committee 34: Lighting.

The text of this Amendment is based on the following documents:

Draft	Report on voting
34/1014/CDV	34/1079A/RVC

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 Amendment is English.

This document was drafted in accordance with 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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications/](http://www.iec.ch/publications/).

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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.

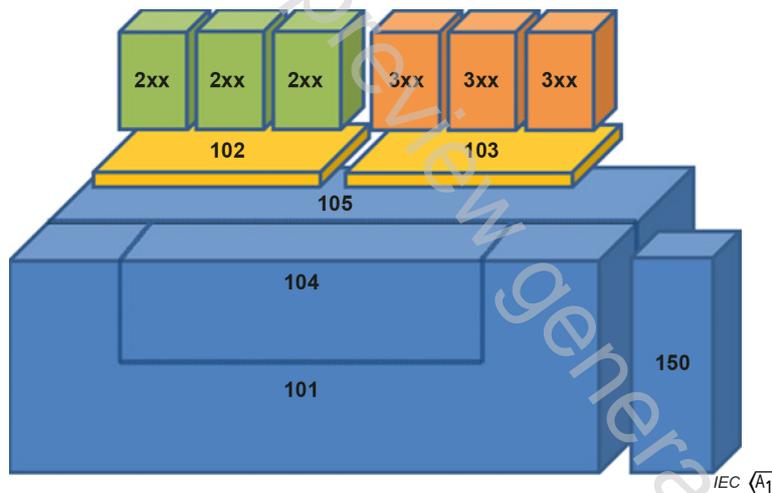
The 2xx parts extend the general requirements for control gear with lamp specific extensions (mainly for backward compatibility with Edition 1 of IEC 62386) and with control gear specific features.

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 62386-304 is intended to be used in conjunction with <sup>A1</sup> IEC 62386-101:2022 <sup>A1</sup>, <sup>A1</sup> ~~text~~ <sup>A1</sup>, <sup>A1</sup> IEC 62386-103:2022 <sup>A1</sup> <sup>A1</sup> ~~text~~ <sup>A1</sup>. The division of IEC 62386 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.

<sup>A1</sup>



**Figure 1 – IEC 62386 graphical overview**

This document, and the other parts that make up the IEC 62386-300 series, in referring to any of the clauses of IEC 62386-1XX, specifies the extent to which such a clause is applicable and the order in which the tests are to be performed; the parts also include additional requirements, as necessary.

Where the requirements of any of the clauses of IEC 62386-1XX are referred to in this document by the sentence “The requirements of IEC 62386-1XX, Clause “n” apply”, this sentence is to be interpreted as meaning that all requirements of the clause in question of Part 1XX apply, except any which are clearly inapplicable.

The standardization of the control interface for control devices is intended to achieve compatible co-existence and multi-master operation between electronic control gear and lighting control devices, below the level of building management systems. This document describes a method of implementing light sensors.

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*”.

Time value is expressed in minutes and seconds: mm:ss

Range of values: [lowest, highest]

Command: “COMMAND NAME”

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## DIGITAL ADDRESSABLE LIGHTING INTERFACE –

### Part 304: Particular requirements – Input devices – Light sensor

#### 1 Scope

<sup>A1</sup> This part of IEC 62386 is applicable to input devices that provide illuminance level information to the lighting control system through light level sensing.

This document is only applicable to input devices complying with IEC 62386-103:2022. <sup>A1</sup>

#### 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.

<sup>A1</sup> IEC 62386-101:2022 <sup>A1</sup>, *Digital addressable lighting interface – Part 101: General requirements – System components*

<sup>A1</sup> *deleted text* <sup>A1</sup>

<sup>A1</sup> IEC 62386-103:2022 <sup>A1</sup>, *Digital addressable lighting interface – Part 103: General requirements – Control devices*

<sup>A1</sup> *deleted text* <sup>A1</sup>

<sup>A1</sup> IEC 62386-333:2018, *Digital addressable lighting interface – Part 333: Particular requirements for control devices – Manual configuration (feature type 33)* <sup>A1</sup>

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62386-101 and IEC 62386-103 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

##### **instance**

illuminance level input signal processing unit of an input device

[SOURCE: <sup>A1</sup> IEC 62386-101:2022 <sup>A1</sup>, 3.29, modified — addition of "illuminance level input"]

##### 3.2

##### **strictly monotonic**

either entirely increasing or decreasing without repeating values

<sup>A1</sup> *deleted text* <sup>A1</sup>