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Digitalt adresserbart gränssnitt för ljusarmaturer (DALI) – Del 102: Allmänna fordringar på driftdon

*Digital addressable lighting interface –
Part 102: General requirements –
Control gear*

Som svensk standard gäller europastandarden EN IEC 62386-102:2022. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 62386-102:2022.

Nationellt förord

Europastandarden EN IEC 62386-102:2022

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- **IEC 62386-102, Third edition, 2022 - Digital addressable lighting interface –
Part 102: General requirements –
Control gear**

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English Version

Digital addressable lighting interface - Part 102: General
requirements - Control gear
(IEC 62386-102:2022)

Interface d'éclairage adressable numérique - Partie 102:
Exigences générales - Appareillages de commande
(IEC 62386-102:2022)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil
102: Allgemeine Anforderungen - Betriebsgeräte
(IEC 62386-102:2022)

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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 34/948/FDIS, future edition 3 of IEC 62386-102, prepared by IEC/TC 34 "Lighting" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62386-102:2022.

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) 2023-09-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-12-21

This document supersedes EN 62386-102:2014 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 62386-102:2022 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 standard indicated:

IEC 62386-102:2014 NOTE Harmonized as EN 62386-102:2014 (not modified)

IEC 62386-104 NOTE Harmonized as EN IEC 62386-104

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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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IEC 62386-103	2022	Digital addressable lighting interface - Part 103: General requirements - Control devices	EN IEC 62386-103	2022
IEC 62386-2XX	series	Digital addressable lighting interface - Part 2XX: Particular requirements for control gear	EN 62386-2XX	series

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Digital addressable lighting interface –
Part 102: General requirements – Control gear**

**Interface d'éclairage adressable numérique –
Partie 102: Exigences générales – Appareillages de commande**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE –**Part 102: General requirements – Control gear****FOREWORD**

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IEC 62386-102 has been prepared by IEC technical committee 34: Lighting. It is an International Standard.

This third edition cancels and replaces the second edition published in 2014 and Amendment 1:2018. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- the scope has been updated;
- references have been updated;
- memory bank reading of multi-byte values has been added;
- memory bank 0 and common memory bank requirements have been updated;
- reserved memory banks have been updated;

- non-volatile memory (NVM) save time has been added, and SAVE PERSISTENT VARIABLES removed;
- version number has been updated;
- bus unit configuration has been added.

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

Draft	Report on voting
34/948/FDIS	34/989/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 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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

This Part 102 of IEC 62386 is intended to be used in conjunction with Part 101, which contains general requirements for the relevant product type (system), and with the appropriate Part 2xx (particular requirements for control gear) containing clauses to supplement or modify the corresponding clauses in Part 101 and Part 102 in order to provide the relevant requirements for each type of product.

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

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

IEC 62386 contains several parts, referred to as series. The IEC 62386 series specifies a bus system for control by digital signals of electronic lighting equipment. 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. Part 104 and Part 105 can be applied to control gear or control devices. Part 104 gives requirements for wireless and alternative wired system components. Part 105 describes firmware transfer. Part 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 third edition of IEC 62386-102 is intended to be used in conjunction with IEC 62386-101 and with the various parts that make up the IEC 62386-2xx series for control gear, and can be used together with IEC 62386-103 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 below.

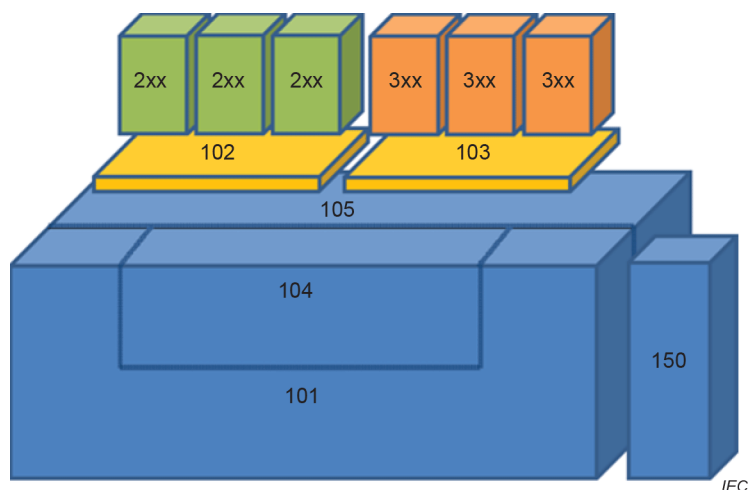


Figure 1 – IEC 62386 graphical overview

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 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 and "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 102: General requirements – Control gear

1 Scope

This part of IEC 62386 is applicable to control gear for control by digital signals of electronic lighting equipment.

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 62386-2xx (all parts), *Digital addressable lighting interface – Part 2xx: Particular requirements for control gear*