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

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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 (dop) 2023-09-21 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2025-12-21 document have to be withdrawn

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

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Endorsement notice

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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

EN IEC 62386-102:2022 (E)

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>	EN/HD	<u>Year</u>
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 62386-2XX	series	Digital addressable lighting interface - Part 2XX: Particular requirements for control gear	EN 62386-2XX	series

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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

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CONTENTS

Ε(OREWOR	D	7
IN	ITRODUC	TION	9
1	Scope		11
2	Norma	tive references	11
3		and definitions	
4		al	
_		General	
		/ersion number	
5		cal specification	
		ower supply	
6			
7		nission protocol structure	
		General	
		6-bit forward frame encoding	
	7.2.1	General	
	7.2.2	Address byte	
0	7.2.3	Opcode byte	
8	_		
9		d of operation	
		General(Standards.iteh.ai)	
		Control gear	
	9.2.1	GeneralSIST EN IEC 02380-102:2023	
	9.2.2	ntps://standards.nen.ai/cataiog/standards/sist//cocceee-e9dz-4/06-900/	
		Dimming curve 0008400274.7	
		Calculating "targetLevel"	
		ading	
	9.5.1	General	
	9.5.2	Fade time	
	9.5.3	Fade rate	
	9.5.4	Extended fade time	
	9.5.5	Using the fade time	
	9.5.6	Using the fade rate	
	9.5.7	System response to changes during a fade	
	9.5.8	System response to changes during standby and startup	
	9.5.9	Stopping a fade	
		Commands	
	9.7.1	General	
	9.7.1	Level instructions without fade	
	9.7.3	Level instructions initiating a fade	
	9.7.4	Configuration instructions	
	9.7.5	Queries	
	9.7.6	Special commands	
	9.7.7	Application extended commands	
		Command iterations	
	9.8.1	General	

9.8.2	Command iteration of "UP" and "DOWN" commands	28
9.8.3	B DAPC SEQUENCE (deprecated)	29
9.9	Modes of operation	30
9.9.	1 General	30
9.9.2	Operating mode 0x00: standard mode	30
9.9.3	Operating mode 0x01 to 0x7F: reserved	30
9.9.4	Operating mode 0x80 to 0xFF: manufacturer-specific modes	30
9.10	Memory banks	30
9.10	.1 General	30
9.10	.2 Memory map	31
9.10	.3 Selecting a memory bank location	32
9.10	.4 Protectable memory locations	32
9.10	.5 Memory bank reading	32
9.10	.6 Memory bank writing	34
9.10	.7 Memory bank 0	35
9.10	.8 Memory bank 1 (optional)	37
9.10	.9 Manufacturer-specific memory banks	39
9.10	.10 Reserved memory banks	39
9.11	Reset	39
9.11	.1 Reset operation	39
9.11	.2 Reset memory bank operation	39
9.12	System failure	
9.13	Power on	40
9.14	Assigning short addresses	41
9.14	.1 General	41
9.14	.2 Random address allocation	41
9.14	.3 Identification of a device	42
9.14	.4 Direct address allocation	43
9.15	Failure state behaviour	43
9.16	Status information	43
9.16	.1 General	43
9.16	.2 Bit 0: Control gear failure	44
9.16	.3 Bit 1: lamp failure	44
9.16	.4 Bit 2: lamp on	46
9.16	.5 Bit 3: limit error	46
9.16	.6 Bit 4: fade running	46
9.16	.7 Bit 5: reset state	46
9.16	.8 Bit 6: missing short address	46
9.16	.9 Bit 7: power cycle seen	46
9.17	Non-volatile memory	46
9.18	Device types and features	47
9.19	Using scenes	47
9.20	Current bus unit configuration	48
10 Decl	aration of variables	49
11 Defi	nition of commands	52
11.1	General	52
11.2	Overview sheets	
11.3	Level instructions	
	.1 DAPC (level)	

- 4 - IEC 62386-102:2022 © IEC 2022

	11.3.2	OFF	.57
	11.3.3	UP	57
	11.3.4	DOWN	57
	11.3.5	STEP UP	58
	11.3.6	STEP DOWN	58
	11.3.7	RECALL MAX LEVEL	58
	11.3.8	RECALL MIN LEVEL	59
	11.3.9	STEP DOWN AND OFF	59
	11.3.10	ON AND STEP UP	59
	11.3.11	ENABLE DAPC SEQUENCE	60
	11.3.12	GO TO LAST ACTIVE LEVEL	60
	11.3.13	CONTINUOUS UP	60
	11.3.14	CONTINUOUS DOWN	60
	11.3.15	GO TO SCENE (sceneNumber)	.60
1 ′	1.4 Conf	figuration instructions	60
	11.4.1	General	60
	11.4.2	RESET	61
	11.4.3	STORE ACTUAL LEVEL IN DTR0	61
	11.4.4	SET OPERATING MODE (DTR0)	61
	11.4.5	RESET MEMORY BANK (DTR0)	61
	11.4.6	IDENTIFY DEVICE	61
	11.4.7	SET MAX LEVEL (DTR0)	
	11.4.8	SET MIN LEVEL (DTRO)	62
	11.4.9	SET SYSTEM FAILURE LEVEL (DTR0)	
	11.4.10	SET POWER ON LEVEL (DTR0)	63
	11.4.11 _{ttp}	SET FADE TIME (DTR0)	
	11.4.12	SET FADE RATE (DTR0)	63
	11.4.13	SET EXTENDED FADE TIME (DTR0)	63
	11.4.14	SET SCENE (DTR0, sceneX)	64
	11.4.15	REMOVE FROM SCENE (sceneX)	64
	11.4.16	ADD TO GROUP (group)	64
	11.4.17	REMOVE FROM GROUP (group)	64
	11.4.18	SET SHORT ADDRESS (DTR0)	64
	11.4.19	ENABLE WRITE MEMORY	65
1 ′	1.5 Que	ries	65
	11.5.1	General	65
	11.5.2	QUERY STATUS	65
	11.5.3	QUERY CONTROL GEAR PRESENT	65
	11.5.4	QUERY CONTROL GEAR FAILURE	65
	11.5.5	QUERY LAMP FAILURE	65
	11.5.6	QUERY LAMP POWER ON	65
	11.5.7	QUERY LIMIT ERROR	65
	11.5.8	QUERY RESET STATE	
	11.5.9	QUERY MISSING SHORT ADDRESS	65
	11.5.10	QUERY VERSION NUMBER	66
	11.5.11	QUERY CONTENT DTR0	66
	11.5.12	QUERY DEVICE TYPE	66
	11.5.13	QUERY NEXT DEVICE TYPE	66
	11 5 14	OLIERY PHYSICAL MINIMUM	66

11.5.15	QUERY POWER FAILURE	67
11.5.16	QUERY CONTENT DTR1	67
11.5.17	QUERY CONTENT DTR2	67
11.5.18	QUERY OPERATING MODE	67
11.5.19	QUERY LIGHT SOURCE TYPE	67
11.5.20	QUERY ACTUAL LEVEL	68
11.5.21	QUERY MAX LEVEL	68
11.5.22	QUERY MIN LEVEL	68
11.5.23	QUERY POWER ON LEVEL	68
11.5.24	QUERY SYSTEM FAILURE LEVEL	68
11.5.25	QUERY FADE TIME/FADE RATE	68
11.5.26	QUERY EXTENDED FADE TIME	
11.5.27	QUERY MANUFACTURER SPECIFIC MODE	68
11.5.28	QUERY SCENE LEVEL (sceneX)	68
11.5.29	QUERY GROUPS 0-7	69
11.5.30	QUERY GROUPS 8-15	69
11.5.31	QUERY RANDOM ADDRESS (H)	69
11.5.32	QUERY RANDOM ADDRESS (M)	69
11.5.33	QUERY RANDOM ADDRESS (L)	69
11.5.34	READ MEMORY LOCATION (DTR1, DTR0)	69
11.6 App	lication extended commands	69
11.6.1	General	
11.6.2	QUERY EXTENDED VERSION NUMBER	
11.7 Spe	cial commands	
11.7.1	General <u>915T-EN-1EQ-6238-6-1-02-2023</u>	
11.7.2 ₁₁₁₁	TERMINATE	
11.7.3	DTR0 (data)\\\08.4\\00.27\\\7.6\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	70
11.7.4	INITIALISE (device)	70
11.7.5	RANDOMISE	
11.7.6	COMPARE	71
11.7.7	WITHDRAW	71
11.7.8	SEARCHADDRH (data)	71
11.7.9	SEARCHADDRM (data)	72
11.7.10	SEARCHADDRL (data)	72
11.7.11	PROGRAM SHORT ADDRESS (data)	72
11.7.12	VERIFY SHORT ADDRESS (data)	72
11.7.13	QUERY SHORT ADDRESS	72
11.7.14	ENABLE DEVICE TYPE (data)	73
11.7.15	DTR1 (data)	73
11.7.16	DTR2 (data)	73
11.7.17	WRITE MEMORY LOCATION (DTR1, DTR0, data)	
11.7.18	WRITE MEMORY LOCATION - NO REPLY (DTR1, DTR0, data)	74
11.7.19	PING	
Annex A (infor	mative) Examples of algorithms	75
A.1 Ran	ndom address allocation	75
A.2 One	e single control gear connected to the control device	75
A.3 Usii	ng application extended commands	76
Annex B (norn	native) High resolution dimmer	77
Bibliography		79

Figure 1 – IEC 62386 graphical overview	9
Figure 2 – Control gear directly operating a light source	16
Figure 3 – Dimming curve	18
Figure 4 – Level over time, fading up and down	21
Figure 5 – Timing and response when executing command iteration	29
Figure 6 – Correlation between "lampFailure", "lampOn" and "fadeRunning" bits	45
Figure B.1 – Level behaviour in case of off-grid starting points	78
T 11 4 40 19	4.5
Table 1 – 16-bit command frame encoding	
Table 2 – Dimming curve tolerance	
Table 3 – Dimming curve	
Table 4 – Fade times	
Table 5 – Fade rates	23
Table 6 – Extended fade time – Base value	
Table 7 – Extended fade time – Multiplier	24
Table 8 – Memory types	31
Table 9 – Basic memory map of memory banks	31
Table 10 – Memory map of memory bank 0	35
Table 11 – Memory map of memory bank 1	38
Table 12 – Power on timing	41
Table 13 – Control gear status	43
Table 14 – Scenesdada.irahi/karintan	48
Table 15 – Current bus unit configuration ist.cn.icc	49
Table 16 – Declaration of variables	50
Table 17 – Standard commands	52
Table 18 – Special commands	56
Table 19 – Light source type encoding	67
Table 20 – Device addressing with "INITIALISE (device)"	70

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE -

Part 102: General requirements – Control gear

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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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;

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 non-volatile memory (NVM) save time has been added, and SAVE PERSISTENT VARIABLES removed;

- 8 -

- 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.

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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.

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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.

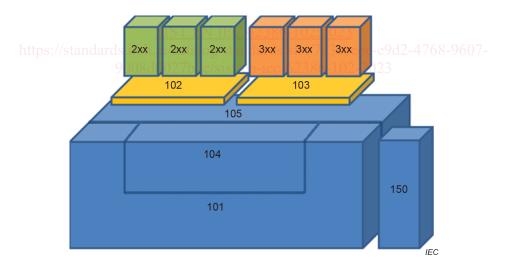


Figure 1 – IEC 62386 graphical overview

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 XXXXXXXXX or in the format XXXXX XXXX, where X is 0 or 1 and "x" in binary numbers means "don't care".