



SLOVENSKI STANDARD
SIST EN 62386-101:2009
01-november-2009

Nadomešča:
SIST EN 60929:2006

Digitalni naslovljivi vmesnik za razsvetljavo - 101. del: Splošne zahteve - Sistem (IEC 62386-101:2009)

Digital addressable lighting interface - Part 101: General requirements - System (IEC 62386-101:2009)

Digital adressierbare Schnittstelle für die Beleuchtung - Teil 101: Allgemeine Anforderungen - System (IEC 62386-101:2009)

Interface d'éclairage adressable numérique - Partie 101: Exigences générales - Système (CEI 62386-101:2009)

Ta slovenski standard je istoveten z: EN 62386-101:2009

ICS:

29.140.50	Instalacijski sistemi za razsvetljavo	Lighting installation systems
35.200	Vmesniška in povezovalna oprema	Interface and interconnection equipment

SIST EN 62386-101:2009 en,fr

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62386-101:2009

<https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62386-101

August 2009

ICS 29.140; 29.140.50

Partially supersedes EN 60929:2006

English version

**Digital addressable lighting interface -
Part 101: General requirements -
System**
(IEC 62386-101:2009)

Interface d'éclairage
adressable numérique -
Partie 101: Exigences générales -
Système
(CEI 62386-101:2009)

Digital adressierbare Schnittstelle
für die Beleuchtung -
Teil 101: Allgemeine Anforderungen -
System
(IEC 62386-101:2009)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This European Standard was approved by CENELEC on 2009-07-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 34C/860/FDIS, future edition 1 of IEC 62386-101, prepared by SC 34C, Auxiliaries for lamps, of IEC TC 34, Lamps and related equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62386-101 on 2009-07-01.

EN 62386-101:2009, together with EN 62386-102 and EN 62386-201, replaces Clause E.4, "Control by digital signals", and Annex G, "Test procedures for ballasts with digital control interface according to Clause E.4" of EN 60929:2006.

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

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2010-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-07-01

Annex ZA has been added by CENELEC.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
Endorsement notice

The text of the International Standard IEC 62386-101:2009 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 60921	NOTE	Harmonized as EN 60921:2004 (not modified).
IEC 60923	NOTE	Harmonized as EN 60923:2005 (not modified).
IEC 60925	NOTE	Harmonized as EN 60925:1991 (not modified).
IEC 60929	NOTE	Harmonized as EN 60929:2006 (not modified).
IEC 61347-1	NOTE	Harmonized as EN 61347-1:2007 (modified).
IEC 61547	NOTE	Harmonized as EN 61547:2009 (not modified).
CISPR 15	NOTE	Harmonized as EN 55015:2006 (not modified).

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60598-1 (mod)	- ¹⁾	Luminaires - Part 1: General requirements and tests	EN 60598-1 + A11	2008 ²⁾ 2009
IEC 60669-2-1 (mod)	2002	Switches for household and similar fixed electrical installations -	EN 60669-2-1 + corr. December	2004 2007
A1 (mod)	2008	Part 2-1: Particular requirements - Electronic switches	A1	2009
IEC 61347-2-3	2000	Lamp controlgear - Part 2-3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps	EN 61347-2-3 + corr. July	2001 2003
IEC 62386-102	2009	Digital addressable lighting interface - Part 102: General requirements - Control gear	EN 62386-102	2009

SIST EN 62386-101:2009

<https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009>

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62386-101:2009

<https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009>



IEC 62386-101

Edition 1.0 2009-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Digital addressable lighting interface –
Part 101: General requirements – System**

**Interface d'éclairage adressable numérique –
Partie 101: Exigences générales – Système**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

N

ICS 29.140; 29.140.50

ISBN 2-8318-1027-1

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions.....	6
4 General.....	7
4.1 Purpose.....	7
4.2 Master-slave structure.....	7
4.3 Specification overview.....	7
5 Electrical specification.....	8
5.1 General.....	8
5.2 Marking of the control input terminals.....	8
5.3 Characteristics of the control interface.....	8
5.4 Insulating system of the control input terminals.....	9
5.5 Signal voltage rating.....	9
5.6 Signal current rating.....	10
5.7 Signal rise time and fall time.....	12
6 Interface power supply.....	12
6.1 General.....	12
6.2 Marking of the power supply terminals.....	12
6.3 Insulating system of the power supply terminals.....	12
6.4 Voltage rating.....	13
6.5 Current rating.....	13
6.6 Timing requirements.....	13
7 Transmission protocol structure.....	13
8 Timing.....	13
9 Method of operation.....	13
10 Declaration of variables.....	13
11 Definition of commands.....	13
Bibliography.....	15
Figure 1 – Equivalent circuit of the control interface.....	8
Figure 2 – Voltage levels.....	10
Figure 3 – Voltage and current levels for forward and backward transmission at a control gear.....	11
Figure 4 – Rise time and fall time at the control interface.....	12

INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL ADDRESSABLE LIGHTING INTERFACE –

Part 101: General requirements –
System

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62386-101 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This International Standard, together with IEC 62386-102 and IEC 62386-201, replaces Clause E.4, "Control by digital signals", and Annex G, "Test procedures for ballasts with digital control interface according to Clause E.4" of IEC 60929:2006.

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

FDIS	Report on voting
34C/860/FDIS	34C/873/RVD

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

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

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

A list of all parts of 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 publication will remain unchanged until the maintenance result date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 62386-101:2009](https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009)

<https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009>

INTRODUCTION

This first edition of IEC 62386-101 is published in conjunction with IEC 62386-102 and with the various parts that make up the IEC 62386-200 series for control gear. A further number of parts covering control devices (to be published as the general requirements standard IEC 62386-103 and the various parts that make up the IEC 62386-300 series of particular requirements for control devices) is under consideration. 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.

This International Standard, and the other parts that make up the IEC 62386-100 series, in referring to any of the clauses of IEC 62386-101 or IEC 62386-102, specify 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.

All numbers used in this International Standard 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".

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 62386-101:2009](https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009)

<https://standards.iteh.ai/catalog/standards/sist/f4c83719-d9b3-489c-811f-21353d016d49/sist-en-62386-101-2009>