IEC 62756-1

Edition 1.0 2015-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Digital load side transmission lighting control (DLT) – Part 1: Basic requirements

Commande d'éclairage par transmission numérique côté charge (DLT) – Partie 1: Exigences de base

IEC 62756-1:2015-05(en-fr)

IEC Central Office
3, rue de Varembé
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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DIGITAL LOAD SIDE TRANSMISSION LIGHTING CONTROL (DLT) –

Part 1: Basic requirements

FOREWORD

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International Standard IEC 62756-1 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC technical committee 34: Lamps and related equipment.

This bilingual version (2015-12) corresponds to the English version, published in 2015-05.

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

CDV	Report on voting
34C/1054/CDV	34C/1081B/RVC

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

The French version of this standard has not been voted upon.

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

A list of all parts in the IEC 62756 series, published under the general title *Digital load side transmission lighting control (DLT)*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website 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- withdrawn,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.

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INTRODUCTION

This standard concerning Digital Load Side Transmission Lighting Control (DLT) describes a protocol for simple control of brightness, colour, colour temperature, and other parameters for the purpose of controlling lighting sources such as CFLi, LED light engines, electronic control gear and any other light source with integrated or external control gear.

This protocol uses existing wiring and allows easy retrofit of standard switches, dimmers and lamps with the new devices described in this standard, with little or no configuration.

The following standards contain safety requirements for control devices and control gear:

– IEC 60669-2-1, *Switches for household and similar fixed electrical installations – Part 2-1: Particular requirements – Electronic switches*,

– IEC 61347, *Lamp control gear*,

– IEC 60968, *Self-ballasted lamps for general lighting services – Safety requirements*,

– IEC 62560, *Self-ballasted LED-lamps for general lighting services by voltage > 50 V – Safety specifications*.

DIGITAL LOAD SIDE TRANSMISSION LIGHTING CONTROL (DLT) –

Part 1: Basic requirements

1 Scope

This International Standard specifies a protocol, electrical interface and test procedures for control of electronic lighting equipment by digital signals over the load side mains wiring.

Safety requirements are not covered by this standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60364 (all parts), *Low-voltage electrical installations*

IEC 60038, *IEC standard voltages*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
load side
wire from the output of the control device to the supply input of one or more control gear

3.2
interface
wires used for both supply of AC mains power and data transfer

3.3
control device
device that is connected to the interface and sends commands to at least one control gear

[SOURCE: IEC 62386-101:2009, 3.1, modified — "in order to control other devices (for example lamp control gear) connected to the same interface" has been replaced by "to at least one control gear"]

3.4
control gear
one or more components between the supply and one or more lamps which may serve to transform the supply voltage, limit the current of the lamp(s) to the required value, provide starting voltage and preheating current, prevent cold starting, correct power factor or reduce radio interference.

Note 1 to entry: Lamps may have an integrated control gear such as an integrated compact fluorescent lamp or integrated LED lamp. Any references to control gear will include any such integrated lamps.

[SOURCE: IEC 62386-101:2009, 3.2]