AS/NZS IEC 62386.253:2024
IEC 62386-253:2023

Australian/New Zealand Standard™

Digital addressable lighting interface

Part 253: Particular requirements — Diagnostics and maintenance (device type 52)

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Better Regulation Division (Fair Trading, SafeWork NSW, TestSafe)
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Consumers Federation of Australia
Department of Climate Change, Energy, the Environment and Water
Electrical Compliance Testing Association of Australia
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Joint Accreditation System of Australia and New Zealand — New Zealand
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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EL-041, Lighting.

The objective of this document is to specify the information related to diagnostics and maintenance information accessible through memory banks. This document builds on the digital addressable lighting interface as specified in the IEC 62386 series, by adding specific requirements for data exchange. The information given for light sources in this document is specific to LED light sources.

This document is only applicable to control gear complying with IEC 62386-102.

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FOREWORD

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

Draft	Report on voting
34/1021/FDIS	34/1042/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.

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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 253 of IEC 62386 is intended to be used in conjunction with:

- Part 101, which contains general requirements for system components;
- Part 102, which contains general requirements for control gear.

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.

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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 first edition of IEC 62386-253 is intended to be used in conjunction with IEC 62386-101:2022 and IEC 62386-102:2022. 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.

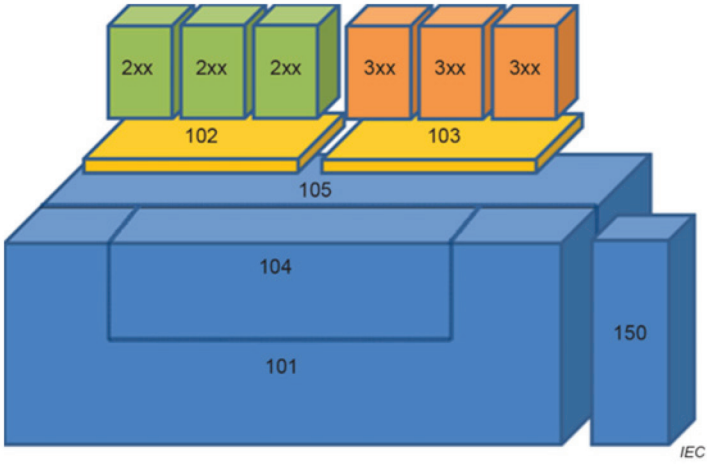

Figure 1 — IEC 62386 graphical overview

When this part of IEC 62386 refers to any of the clauses 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; "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".

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