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Irish Standard  
I.S. EN 61988-3-2:2009

# Plasma display panels -- Part 3-2: Interface - Electrical interface (IEC 61988-3-2:2009 (EQV))

## I.S. EN 61988-3-2:2009

*Incorporating amendments/corrigenda issued since publication:*

<i>This document replaces:</i>	<i>This document is based on:</i> EN 61988-3-2:2009	<i>Published:</i> 6 November, 2009
This document was published under the authority of the NSAI and comes into effect on:  9 February, 2010		ICS number: 31.260
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EUROPEAN STANDARD

**EN 61988-3-2**

NORME EUROPÉENNE

November 2009

EUROPÄISCHE NORM

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ICS 31.260

English version

**Plasma display panels -  
Part 3-2: Interface -  
Electrical interface  
(IEC 61988-3-2:2009)**

Panneaux d'affichage à plasma -  
Partie 3-2: Interface -  
Interface électrique  
(CEI 61988-3-2:2009)

Plasmabildschirme -  
Teil 3-2: Schnittstelle -  
Elektrische Schnittstelle  
(IEC 61988-3-2:2009)

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**CENELEC**

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

**Central Secretariat: Avenue Marnix 17, B - 1000 Brussels**

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**I.S. EN 61988-3-2:2009**

EN 61988-3-2:2009

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**Foreword**

The text of document 110/181/FDIS, future edition 1 of IEC 61988-3-2, prepared by IEC TC 110, Flat panel display devices, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61988-3-2 on 2009-09-01.

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) 2010-06-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2012-09-01

Annex ZA has been added by CENELEC.

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**Endorsement notice**

The text of the International Standard IEC 61988-3-2:2009 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 60068-1 | NOTE Harmonized as EN 60068-1:1994 (not modified). |
| IEC 60107-1 | NOTE Harmonized as EN 60107-1:1997 (not modified). |

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## 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 61988-1	- <sup>1)</sup>	Plasma display panels - Part 1: Terminology and letter symbols	EN 61988-1	2003 <sup>2)</sup>
IEC 61988-2-1	- <sup>1)</sup>	Plasma display panels - Part 2-1: Measuring methods - Optical	EN 61988-2-1	2002 <sup>2)</sup>
IEC 61988-2-2	- <sup>1)</sup>	Plasma display panels - Part 2-2: Measuring methods - Optoelectrical	EN 61988-2-2	2003 <sup>2)</sup>
ANSI TIA/ EIA-644-A	- <sup>1)</sup>	Electrical Characteristics of Low Voltage Differential Signaling (LVDS) Interface Circuits	-	-
JEIDA-59	1999	Digital Interface Standards for Monitor	-	-

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<sup>1)</sup> Undated reference.

<sup>2)</sup> Valid edition at date of issue.

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## PLASMA DISPLAY PANELS –

Part 3-2: Interface –  
Electrical interface

## FOREWORD

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International Standard IEC 61988-3-2 has been prepared by IEC technical committee 110: Flat panel display devices.

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

FDIS	Report on voting
110/181/FDIS	110/190/RVD

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

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

A list of all the parts in the IEC 61988 series, under the general title *Plasma display panels*, 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.

## PLASMA DISPLAY PANELS –

### Part 3-2: Interface – Electrical interface

#### 1 Scope

This part of IEC 61988 defines the electrical interface of digital video data signals, synchronization signals and functional signals between the image processing board of the PDP set and the control board of the PDP module, and defines the description of the pin assignment of the connectors.

#### 2 Normative references

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.

IEC 61988-1, *Plasma display panels – Part 1: Terminology and letter symbols*

IEC 61988-2-1, *Plasma display panels – Part 2-1: Measuring methods – Optical*

IEC 61988-2-2, *Plasma display panels – Part 2-2: Measuring methods – Optoelectrical*

TIA/EIA-644A, *Electrical characteristics of low voltage differential signaling (LVDS) interface circuits*

JEIDA-59-1999, *Digital interface standards for monitor* (only available in English)

#### 3 Terms, definitions and abbreviations

##### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61988-1, IEC 60068-1 and IEC 60107-1 as well as the following apply.

##### 3.1.1

##### **image processing board**

circuit board including A/D converter, scaler and video decoder, deinterlacing for image signal from input device such as TV-tuner, PC, DVD, etc.

##### 3.2 Abbreviations

NOTE The following are acronyms for reference.

TTL	Transistor-transistor logic
LVDS	Low voltage differential signalling
TMDS	Transition minimized differential signalling
HS	Horizontal synchronization
VS	Vertical synchronization
DE	Data enable
DCLK	Data clock
APC	Auto power control

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