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Digital video interface - Gigabit video interface for multimedia systems

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/15

Obsahuje: EN 62889:2015, IEC 62889:2015

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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English Version

Digital video interface - Gigabit video interface for multimedia systems (IEC 62889:2015)

Interface vidéo numérique - Interface vidéo Gigabit pour les systèmes multimédia (IEC 62889:2015)

Digitale Videoschnittstelle - Gigabit Video Interface (GVIF) für Multimediasysteme (IEC 62889:2015)

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Foreword

The text of document 100/2193/CDV, future edition 1 of IEC 62889, prepared by technical area 4 "Digital system interfaces and protocols", of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62889:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2016-02-27 national level by publication of an identical national standard or by endorsement
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Annex ZA

(normative)

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NOTE 1 When 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 62315-1	2003	DTV profiles for uncompressed digital video interfaces - Part 1: General	EN 62315-1	2003
ITU-R BT.601-5	-	Studio encoding parameters of digital television for standard 4:3 and wide-screen 16:9 aspect ratios	-	-
ITU-R BT.656-5	-	Interface for digital component video signals in 525-line and 625-line television systems operating at the 4:2:2 level of Recommendation ITU-R BT.601	-	-



IEC 62889

Edition 1.0 2015-04

INTERNATIONAL STANDARD



Digital video interface - Gigabit video interface for multimedia systems





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IEC 62889

Edition 1.0 2015-04

INTERNATIONAL STANDARD



Digital video interface - Gigabit video interface for multimedia systems

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIGITAL VIDEO INTERFACE – GIGABIT VIDEO INTERFACE FOR MULTIMEDIA SYSTEMS

FOREWORD

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International Standard IEC 62889 has been prepared by subcommittee technical area 4: Digital system interfaces and protocols, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

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

CDV	Report on voting
100/2193/CDV	100/2298/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.

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

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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 International Standard is based on a standard JEITA CP-6101: Digital monitor interface GVIF that was originally specified by the Japan Electronics and Information Technology Industries Association (JEITA).

The gigabit video interface (GVIF) is a serial point to point interface supporting uncompressed digital video links that was designed to address the needs of automotive navigation and entertainment systems, etc., to transport base band digital video information. The GVIF applies low voltage differential signaling (LVDS) technology and makes use of a thin cable consisting of a single shielded twisted pair of conductors that exhibits high noise immunity and low EMI, and is optimized for small size and low weight. The GVIF supports display resolutions ranging from WQVGA through WUXGA with maximum 24 bit per pixel colour video data, and can transmit base band video signal over cable lengths over 10 m. When paired with high bandwidth data content protection (HDCP), the GVIF's standard functions and features address all of the requirements for delivering content protected video from a source to a video display monitor. Optionally, the GVIF supports audio data transmission and user data transmission.

The Association of Radio Industry Business (ARIB) refers the GVIF in its standard ARIB STD-B21 as one of authorized digital video output interfaces.

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DIGITAL VIDEO INTERFACE – GIGABIT VIDEO INTERFACE FOR MULTIMEDIA SYSTEMS

1 Scope

This International Standard describes a serial digital interface, gigabit video interface (GVIF) for the interconnection of digital video equipment. The GVIF is primarily intended to carry high-speed digital video data for general usage and is well suited for multimedia entertainment systems in a vehicle.

This International Standard specifies the physical layer of the interface including transmission line characteristics and electrical characteristics of transmitter and receiver. Mechanical and physical specifications of connectors are not included.

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 62315-1:2003, DTV profiles for uncompressed digital video interfaces – Part 1: General

ITU-R BT.601-5, Studio encoding parameters of digital television for standard 4:3 and wide-screen 16:9 aspect ratios

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