

# INTERNATIONAL STANDARD

# ISO/IEC 10192-1

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## Information technology – Home electronic system (HES) interfaces

### Part 1: Universal Interface (UI) Class 1

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# INFORMATION TECHNOLOGY – HOME ELECTRONIC SYSTEM (HES) INTERFACES –

## Part 1: Universal Interface (UI) Class 1

### FOREWORD

- 1) ISO (International Organization for Standardization) and IEC (International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.
- 2) In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) draw attention to the fact that the European Patent EP PS 0 344 609 B1 "Digital signal transmission system for domestic application" may be needed to implement this International Standard.

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International Standard ISO/IEC 10192-1 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

This publication has been drafted in accordance with the ISO/IEC directives, part 2.

Annexes A and B are for information only.

# INFORMATION TECHNOLOGY – HOME ELECTRONIC SYSTEM (HES) INTERFACES –

## Part 1: Universal Interface (UI) Class 1

### 1 Scope and application

#### 1.1 Scope

This part of ISO/IEC 10192 is one of a set of standards describing the characteristics of a specific home control system called the Home Electronic System, HES.

This standard specifies the characteristics of the Universal Interface Class 1 that connects devices to the home network in an HES for control applications.

This standard informs as to the usefulness of the principles of a UI and forms a basis for new work in this field.

NOTE This standard draws upon text from IEC 60870-5-1:1990 and IEC 60870-5-2:1992.

#### 1.2 Application

This standard specifies a generic interface for a device to connect to a home control network via a Network Adaptor Unit. The home control network signals may be carried on the cabling system being specified in ISO/IEC 15018<sup>1</sup>.

### 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 60227-2, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V – Part 2: Test methods*

IEC 60364-1, *Electrical installations of buildings - Part 1: Fundamental principles, assessment of general characteristics, definitions*

IEC 60603-7, *Connectors for frequencies below 3 MHz for use with printed boards – Part 7: Detail specification for connectors, 8-way, including fixed and free connectors with common mating features, with assessed quality*

IEC 60664-1, *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60870-5-1:1990, *Telecontrol equipment and systems – Part 5: Transmission protocols – Section 1: Transmission frame formats*

ISO/IEC 11801, *Information technology – Generic cabling for customer premises*

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<sup>1</sup> Information technology - Integrated cabling for residential and SOHO (Small Office, Home Office) environments (under development).

ISO/IEC TR 14543-1, *Information technology – Home Electronic System (HES) Architecture – Part 1: Introduction*

ISO/IEC TR 15044, *Information technology – Terminology for the Home Electronic System (HES)*