

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Multimedia home network configuration – Basic reference model –
Part 1: System model**

**Configuration de réseau domestique multimédia – Modèle de référence
de base –
Partie 1: Modèle de système**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MULTIMEDIA HOME NETWORK CONFIGURATION –
BASIC REFERENCE MODEL –**
Part 1: System model**FOREWORD**

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International Standard IEC 62608-1 has been prepared by 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
100/2111/CDV	100/2183/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.

The committee has decided that the contents of this publication will remain unchanged until the stability 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

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- amended.

INTRODUCTION

As well as electronic power, network connectivity is necessary in order to use electronic devices at home. Some applications running on the devices do not work without an inside and outside network.

When a device connects to a home network, an appropriate network service needs to already be in place. Since network connections are a precondition of many applications, such as IEC 62481-1, IEC 62481-2 and IEC 6248-3, a digital living network alliance (DLNA) network management function is necessary.

Sometimes applications need to change the configuration of another device, gateway, and so on. Since it is too difficult to change the configuration of a device manually, an automatic configuration mechanism is needed for the home network. IEC 62514 defines the functions of a multimedia home gateway. This standard complements the multimedia home gateway by enabling to establish network connections automatically.

MULTIMEDIA HOME NETWORK CONFIGURATION – BASIC REFERENCE MODEL –

Part 1: System model

1 Scope

This part of IEC 62608 specifies the basic reference model to configure devices connected to a home network with a configuration framework for network applications running on such devices.

This part of IEC 62608 applies to devices that are connected via cables and switched on and that support the IP protocol. The reference model covers inside and outside network connectivity.

This standard specifies the system model and functions that each component should support.

2 Normative reference

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.

ISO/IEC 7498-1:1994, *Information technology – Open Systems Interconnection – Basic Reference Model: The Basic Model*

3 Terms and definitions

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

3.1

home network

network that connects equipment to be configured in the model

Note 1 to entry: The network is built mainly in a home.

3.2

home gateway

equipment that relays a communication from target equipment to outside the home network

3.3

layer 2

data link layer of the commonly referenced multilayered communication model, open systems interconnection

Note 1 to entry: A description of OSI-layers is given in ISO/IEC 7498-1:1994, Clause 6.

3.4

layer 3

network layer of the commonly referenced multilayered communication model, open systems interconnection