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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

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**Electrical safety -- Classification of interfaces for equipment to
be connected to information and communications technology
networks**

电气安全 与信息技术和通信技术网络连接设备的接口分类
(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method identical with IEC/T R62102.2005 "Electrical Safety and Information Technology and Communication Technology Network Connection Prepared interface classification. " the documents of our country that are consistent with the corresponding international documents that are normative references in this standard are as follows.

--- GB 4943.1-2011 Information technology equipment safety Part 1. General requirements (IEC 60950-1:2005, MOD) this standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This standard by the People's Republic of China Ministry of Industry and Information Technology (E) centralized.

This standard drafting unit. Guangzhou West Standard Institute of Testing and Research Co., Ltd., China Electronics Standardization Institute, Beijing West Technology Development Co., Ltd., China National Accreditation Center for Conformity Assessment.

Introduction

This standard provides guidelines for equipment interface security requirements. The standard lists some of the interfaces and describes their safety categories. This standard Does not contain detailed conformance test content unless used in conjunction with product standards such as IEC 60950-1 and IEC 60950-21.

The equipment safety standards IEC 60950-1 and IEC 60950-21 specify the circuit by SELV circuit, TNV circuit, RFT circuit and dangerous voltage circuit (relative to other circuits) classification requirements. For standalone devices, it is relatively easy to determine their different circuit classes. But some Device, has a data interface and is intended to be connected locally with other devices or over a network. In this case, are scheduled to be connected together the security categories of the interfaces should match each other. Sometimes, the remote device's interface category may not be known. Such as communications equipment and data processing equipment through Different types of interfaces and networks are connected together.

To avoid this, it is necessary to classify the interfaces that are applied to such devices and to choose the security for the device interfaces and network types Category. Similarly, in order to prevent equipment and network damage, the interface should be classified. Relevant protections made by the ITU-TK series of Recommendations put forward.

Electrical Safety and Information Technology and Communication Technology Network Interface classification of connected devices

1 Scope

This standard applies to the device interface. The interfaces within these devices may be connected to the communications network and may constitute one of the communications network architectures Part, it may also provide local data transfer. This standard in accordance with IEC 60950-1 and IEC 60950-21 defined in the type of circuit, communication After analyzing the network characteristics, we give a guide to the classification of interfaces.

This standard deals only with properly interconnected devices, but does not concern the damage caused by one device to another connected to it. Special case love the condition is that the interface may be designed for different purposes at different levels. In this case you should ensure that only the same safety category and Protection level interfaces can be connected together. This is based on specifications (available specifications) from equipment manufacturers and network providers, as well as information on the type of power interface installation.

This standard is for use by equipment manufacturers, network operators, network managers/licensors, standard writers and network installers. it Various interfaces for the

device. The network form is different from the equipment and therefore not included in IEC 60950-1 and IEC 60950-21, it is not included in this standard. However, when determining which device interface requirements apply (eg SELV circuits, TNV-1 circuits, TNV-2 circuit, TNV-3 circuit, etc.), it is necessary to consider the characteristics, installation and form of the communication network.

If you use standard design equipment other than IEC 60950-1 and IEC 60950-21 and their interfaces (for example, IEC 62151 and Phase Other product safety standards), the priority is to use the corresponding requirements of other standards.

If there is a conflict between this standard and the more detailed specification, the latter shall prevail.

The use of this standard does not take into account the equipment or network installation and maintenance ownership or responsibility attribution.

Note: When used in a commercial environment, the terminal equipment is usually connected to a client cable, which has a separate standard for this type of cable.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

IEC 60950-1:2001 Information technology equipment safety Part 1. General requirements (Informationtechnologyequip-ment-Safety-Part 1: Generalrequirements) IEC 60950-21:2002 Information technology equipment security - Part 21. Remote feeding (Informationtechnologyequip-ment-Safety-Part 21: Remotepower)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Derived from the terms and definitions IEC 60950-1

3.1.1

AC mains power ACmainssupply AC power distribution systems external to the equipment powered by AC power. These include common or dedicated power supplies, Unless otherwise provided in this section, but also includes the equivalent power, such as motor-driven generator and uninterruptible power supply.