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

GB/T 21564.5-2008

**Message formats and protocols for serial data interfaces in
alarm transmission systems -- Part 5: Data interfaces**

报警传输系统串行数据接口的信息格式和协议 第5部分：数据接口

(English Translation)

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Foreword

GB/T 21564 "alarm transmission system serial data interface information format and protocol" is divided into five parts, namely.

--- Part 1. General;

--- Part 2. common application layer protocol;

--- Part 3. Common Data Link Layer Protocol;

--- Part 4. Common Transport Layer Protocol;

--- Part 5. Data Interface.

This section GB/T 21564 Part 5.

This part of the revision adopted IEC 60839-7-5.:2001, IEC 60839-7-6.:2001, IEC 60839-7-7.:2001, IEC 60839-7-11.

2001, IEC 60839-7-12.:2001, IEC 60839-7-20.:2001 (English version).

For ease of use, this part of the IEC standard made the following changes.

--- IEC 60839-7-5.:2001, IEC 60839-7-6.:2001, IEC 60839-7-7.:2001, IEC 60839-7-11.:2001, IEC 60839-7-12.:2001, IEC 60839-7-20.:2001 six parts into one part, the title is "alarm transmission System serial data interface information format and protocol Part 5. Data Interface "(Chapter 5 of this section corresponds IEC 60839-7-5; Chapter 6 of

this part corresponds to IEC 60839-7-6; Chapter 7 of this part corresponds to IEC 60839-7-7; This the eighth chapter corresponds to IEC 60839-7-11 and IEC 60839-7-12; the ninth chapter of this section corresponds to IEC 60839-7-20), and Rearrange the reg number.

--- Chapter 7 of this section deleted IEC 60839-7-7 Chapter 10, 11, Chapter III on the device shape and the specific connector " " " " Being " " " " Always " " " " "

--- The title of Chapter 8 of this section as "PSTN interface and dedicated channel PTT using ITU-T recommendation V.23 signaling mouth".

--- Added notes in the back of individual chapters, to play a role in explaining the explanation, easier to understand to use.

--- Remove the IEC foreword, an increase of the introduction part.

This part of the National Security Alarm System Standardization Technical Committee (SAC/TC100) and centralized.

This section drafted by. China University of Mining and Technology (Beijing) Department of Power, SAC/TC100 Secretariat, Hubei Dongrun Technology Co., Ltd., Beijing Aegis Security Technology Co., Ltd. shield.

Introduction

"GE GE GE GE GEOOTHOTOT GE GEOOTOT70 GEOUBOTOTOTOTOR headlick" " " " " " " " " "GE GE GE GE GE7070" "Always GE GE GE701707070" " " " " " " " " "GE GE GEOTORPROT GE GE707070-08 Mar. " " " " " " " " "GE GE GE GE GE GE7070" " " " " " " " " "GE GE GEOTORPROT GE GE7070 this part is based on the earlier RS-232 point-to-point communication model and RS-485 point-to-multipoint bus serial communication model developed of. Therefore, broadband applications are currently widely used and wireless transmission is not described in detail, only part of the link is given annotation and prompt.

Although the model given in this section of the communication rate is slower, but its data transmission control principle and today's various types of broadband applications and wireless Use is the same, so this section for alarm product designers, alarm system planners and alarm system users have good guidance Role and exemplary significance.

By ITU-TV. 24 and ITU-TV. 28 jointly defined interface, it is the familiar EIA-RS232 interface, it is suitable the serial interface protocol used for the interconnection between data terminal equipment in synchronous and asynchronous serial binary data exchange systems is an unbalanced Duplex digital baseband communication interface. The interface is mainly suitable for low transmission rate, transmission distance near the occasion.

The interface defined by ISO/IEC 8482.:1993 is the EIA-RS485 interface that is currently familiar to everyone and is also suitable for synchronization and Asynchronous serial binary

data exchange system, the data terminal equipment, the serial interface between the interconnection protocol. But it is a balanced (differential Type) half-duplex digital baseband communication interface. The interface can support longer distance communication, and can support multi-communication bus between the time-sharing Communication.

By ITU-TV. 23 defines the interface, which is similar to the EIA-RS232 interface specification duplex digital frequency modulation serial communication interface mouth. It can be used for longer distance peer-to-peer communications over telephone systems.

In this section, the initiator of the alarm communication is defined as the master, and the responder of the alarm communication is defined as the slave. It is different from the alarm system in the concept. In the alarm system, the main alarm and alarm slave from the management point of view to explain the significance of its existence. As part of this section the user must be appropriate to distinguish between the two concepts similarities and differences. In the alarm system, an alarm slave can either as a control panel from the responders for the alarm transmission system from the machine, at the same time it can connect the lower part of the bus alarm and the next alarm from the machine, and become the alarm transmission system Host. Other concepts have similar situations, please pay attention to discrimination, so as not to be confused.

Alarm system as one of the important technical indicators --- Alarm response time has been clearly defined in other relevant standards. This part is no longer A new definition is made, but it is recommended that users understand that an alarm event occurs until the terminal device receives and displays information about the alarm, or the local watchman obtains the time interval between alarm messages as the basis for the alarm response time. Due to the transmission of alarm transmission system Transmission delay is an important part of the alarm response time, so this section recommends users of this part of the alarm transmission system transmission Appropriate assessment of the force to ensure the realization of the final system indicators.

Alarm transmission system serial data interface Information format and protocol Part 5. data interface

1 Scope

GB/T 21564 provisions of this part of the data interface requirements, which Chapter 5 provides in accordance with ISO/IEC 8482 with double wire Then the standard interface requirements. A flexible interface is provided that allows one control panel CIE and multiple alarm system transceivers or extensions CIE, they must meet the requirements of ISO/IEC 8482. Suitable for use with alarm system control and indicating equipment (CIE) connected to Standard interface between one or more alarm system transceivers of an alarm transmission system. Chapter 6 specifies the alarm system control and instructions set ITU-T Recommendations V are adopted for equipment and telecommunications equipment. 24/V. 28 Signaling Standard interface requirements for communication where

communication is transmitted the device is a relay device and is not designed for the alarm industry (and therefore does not meet the requirements of the rest of this section). Applies to and standard Quasi-modem, packet switching network, X25 splitter assembly and disassembly equipment interface. Chapter 7 specifies the control and indicating equipment in the alarm system (CIE) and the alarm system transceiver standard interface between the requirements, which alarm system transceiver embedded alarm system control and pointing device in the standard space. Chapter 8 specifies the public switched telephone network (PSTN) and dedicated channel PTT interfaces in the alarm system, Compliance with ITU-T Recommendation V is required by the requirements of the standard interfaces between alarm system transceivers, alarm systems and transmission networks. 23 standard 1200 baud rate of the interface. Suitable for use with alarm system transceiver functions Interfaces between transmissions integrated in a control and indicating device (CIE) Also applies to the alarm receiver terminal receiver to the PSTN and transmission network interface. Chapter 9 specifies the alarm transmission system terminal Requirements for standard interface between transceiver and relay device. Using signaling in line with ITU-TV. 24/V. 28 requirements.

This section applies to the transmission of alarm information and sent to/from the invasion, fire, access control and other information of the social alarm system Transmission, and transmission of information to/from other similar systems.

2 Normative references

The following documents contain provisions which, through reference in this part of GB/T 21564, become the provisions of this section. Any reference to the date of the citation all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to be reached under this section the parties to the agreement examine whether the latest versions of these documents are available. For undated references, the latest version applies to this book section.

GA/T 600.2-2006 Alarm Transmission System Requirements Part 2. General Requirements for Equipment (IEC 60839-5-2.:1991, IDT) GA/T 600.3-2006 Requirements for alarm transmission systems Part 3. Alarm transmission systems using dedicated alarm transmission paths (IEC 60839-5-4.:1991, IDT) GA/T 600.4-2006 Alarm Transmission System Requirements Part 4. Digital Telegraph System Using Public Switched Telephone Networks (IEC 60839-5-5.:1991, IDT) GB/T 21564.1-2008 Alarm transmission system serial data interface information format and protocol - Part 1. General (IEC 60839-7-1.:2001, MOD) GB/T 21564.2-2008 Alarm transmission system serial data interface information format and protocol - Part 2. Common Application Layer Association Discussion (IEC 60839-7-2.:2001, MOD) GB/T 21564.3-2008 Alarm transmission system serial data interface information format and protocol - Part 3. Common data link Layer protocol (IEC 60839-7-3.:2001, MOD)