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

GB/T 17563-2008

Replacing GB/T 17563-1998

**Programmable measuring instruments -- Interface system (byte
serial, bit parallel) -- Codes, formats, protocol and common
commands**

可编程测量设备接口系统(字节串行、位并行)的代码、格式、协议和公共命令
(English Translation)

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Foreword

This standard is identical with IEC 60625-2:1993 (English version). The main differences with the international standards as follows.

--- In order to facilitate the domestic users, we made some editorial changes;

--- According to GB/T 1.1-2000 requirements of the standard format for the layout, modify.

This standard is GB/T 17563-1998 of amendments. This standard replaces GB/T 17563-1998. And GB/T 17563-1998 Comparison, the standard name has changed. This standard is the technical content to make minor adjustments for ease of use, made under this section Column Review.

a) According to China's actual use, in accordance with the provisions of GB/T 1.1-2000, the original text was revised editorial, root According to the English text of the reg number for the re-publishing;

- b) an increase of some of the terms and acronyms;
- c) increasing the appendix content;
- d) a description of the individual in editorial errors were corrected.

This standard Annex A, Annex B, Annex C is informative appendix.

The standard proposed by China Machinery Industry Federation.

The standard measurement and control technology Standardization Technical Committee at its forty-administered by the National industrial processes.

This standard was drafted. Machinery Industrial Instrumentation Technology and Economy Institute.

Drafters of this standard. Ouyang Jinsong, Cheng Yuk, Wang Yumin.

This standard previous editions. GB/T 17563-1998.

GB/T 17563-2008/IEC 60625-2:1993 Programmable measuring instruments - Interface system (byte serial, bit Parallel) code formats, protocols and common commands

1.1 Scope

This standard specifies a set of codes for the device and format, so that these devices can be GB/T 15946 are connected together by a bus. The standard Registration also provides for the realization of the use of independent, device-dependent exchange of information necessary for the communication protocol, and further provides that the instrument system Common applications of common commands and features.

This standard is to be directly used for small-scale instrumentation systems, but also for mainly by the measure, as well as incentives and instrument controller interconnect Consisting of system equipment. It is also used in some devices beyond the meter system-wide.

In addition to this standard defines various device-related information, but also on a number of interface functions GB/T 15964 contained extended and further explained, while maintaining compatibility with the standard.

This standard covers the following topics.

- Subset;
- Including the standard error handling processing protocol packets;
- Clear procedures and response packets grammatical structure;
- Instrument system widely used in public order;
- Standard status reporting structure;

--- System configuration and synchronization protocol.

Application of this standard does not relieve the responsibility of the user at the application level to system compatibility undertaken. Users must be familiar with all system Member properties, in order to make the best system.

Readers of this standard including managers and designers.

1.2 Purpose

The purpose of this standard.

- 1) provide a clear definition of the code structure, formats, protocols, and public order;
- 2) maintaining the versatility to suit a variety of needs within the scope of this standard application;
- 3) improve the degree of equipment from different manufacturers can be interconnected without modification and applications;
- 4) the instrument and related equipment can be limited and extended ability to interconnect to produce, process, and interpret various messages Types of;
- 5) custom code formats, protocols and common commands, to reduce the cost to generate application software and system integration;
- 6) communicate directly, no additional special code translation and conversion between formats and instrumentation systems allow devices.

Notes 1.3

This standard defines a number of common English words, they have special significance within the scope of this standard. These words in GB/T 15946-2008 has different meanings, however, for readability and conciseness of the text, the words used in this standard is desirable. this the standard also defines the messages used to describe the transfer syntax elements on the bus, the syntax element enclosed in angle brackets, for example.

In order to distinguish them from local packets, remote packets and text area.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent GB/T 17563-2008/IEC 60625-2:1993