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CCS N23



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

GB/T 13978-2008

Replacing GB/T 13978-1992

Digital multimeters

数字多用表

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Foreword

This standard replaces GB/T 13978-1992 "Digital Multimeter General technical requirements." The standards are compared with the GB/T 13978-1992 major changes are.

--- Comprehensively revised the inspection rules and compliance criteria.

--- Revised logo, packaging, storage requirements.

--- Canceled a standard feature of test items in Table 7 to Appendix C test items and replace substandard classification. This standard appendix A, Appendices C and D are normative appendix, Appendix B is an informative annex. Since the implementation of this standard, the original national standard GB/T 13978-1992 repealed. The standard proposed by China Machinery Industry Federation. This standard by the National Electrical Instrument Standardization Technical Committee (SAC/TC104) centralized. This standard was drafted. Harbin Electrical Instrument Research Institute, Shanghai EF Electronics Technology Co., Ltd., Shanghai Sida Electronic Instrument Co., The company, Century Man Communication Equipment Co., Ltd., Dongguan Huayi Instrument Technology Co., Ltd., Technology (Dongguan) Limited, the National Electric Instrumentation Engineering Quality Supervision and Inspection Center, Shandong Institute of Metrology, Jiangsu Province Institute of Metrology, Shanghai Measurement and Testing Technology Research Institute, Hubei Electric Power Research Institute, Jiangxi Electric Power Research Institute. The main drafters of this standard. Sit Jin, Liuxian Cheng, Shao Fengyun, Shen Li to Lei, Li Lin, Sun Ping, Zhang Qin, Ma Xuefeng, Ye Jiang Xue, Zhu Dengwei, Liguori land, Hulin Sheng. This standard replaces the standards previously issued as follows:

--- GB/T 13978-1992. DMM

1 Scope

GB/T 13978-2008 is the Chinese national standard on digital multimeters, in the field of metrology and measurement. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 19 August 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 March 2009. Classification: ICS 17.220.20, CCS N23. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard defines the digital multimeter (hereinafter referred to as the instrument) terms, normative references, specifies the technical requirements, test methods And inspection rules, gives the product logo, packaging and storage of some of the basic requirements. This standard applies to various categories of digital multimeter. Also applies to a variety of data processing and information control equipment and automatic test system Or individual instrument system designed for DC voltage, AC voltage, DC current, AC current and resistance digitize analog measurement Various analog. This standard also applies to the same type as the basis to measure the voltage of both other parameters (electric or non-electric) is a digital measuring instruments and their combination with Attachment, or a combination thereof. This standard also applies to digital measurement of digital and analog multimeters or graphic combination, a display portion. This standard does not apply to analog multimeters and other non-digital indicating instrument.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 191-2008 Packaging - Pictorial signs (ISO 780.1997, MOD)

GB/T 2423.1-2001 Environmental testing for electric and electronic products - Part 1. Test methods Tests A. Cold (idt IEC 60068-2-1.1990)

GB/T 2423.2-2001 Environmental testing for electric and electronic products - Part 2. Test methods Test B. high temperature (idt IEC 60068-2-2. 1974)

GB/T 2423.4-1993 electric and electronic products environmental testing procedures Test Db. Damp heat test, cyclic (idt IEC 60068-2-30. 1980)

GB/T 2829-2002 periodic inspection Sampling procedures and tables (suitable for process

stability test)

GB 4208-1993 housing protection (IP Code) (eqv IEC 60529. 1989)

GB 4793.1-2007 measurement, control and laboratory safety requirements for electrical equipment - Part 1. General requirements Radio disturbance characteristics - Limits and methods of measurement

GB 9254-1998 IT equipment

GB 11463-1989 reliability tests for electronic measuring instruments

GB/T 17626.1-2006 Electromagnetic compatibility - Testing and measurement techniques - Overview of immunity tests (IEC 61000-4-1.2000, IDT)

GB/T 17626.2-2006 Electromagnetic compatibility - Testing and measurement techniques - Electrostatic discharge immunity test (IEC 61000-4-2.2000, IDT)

GB/T 17626.3-2006 Electromagnetic compatibility - Testing and measurement techniques RFEMS test (

IEC 61000-4- 3.2000, IDT)