

ICS 17.220

CCS L85



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

GB/T 15289-2013

Replacing GB/T 15289-1994

General specification for digital storage oscilloscope

数字存储示波器通用规范

Issued on: December 31, 2013

Implemented on: July 15, 2014

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 15289-1994 "digital storage oscilloscope General technical requirements and test methods." This standard compared with GB/T 15289-1994, the main changes are as follows:

--- Fixed some of the terms noun, and adds three-dimensional digital oscilloscope channel coupling, high-resolution mode, fast mode waveform capture Eligible rate, waveform intensity, persistence display definitions of the terms.

--- Increased digital persistence display, Test Method for waveform capture rate and other parameters. Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents. The standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This standard by the National Standardization Technical Committee Electronic Measuring Instruments (SAC/TC153) centralized. This standard was drafted. University of Electronic Science and Technology, Beijing Rigol Technologies Co., Ltd., Jiangsu Luyang Electronic Instrument Group companies, industry and Ministry of Information Industry Institute of Electronics Standardization. The main drafters of this standard. Tian Shulin Ye Peng, Wang Tiejun, Wang Yue, Hangu Cheng, Huang Jianguo, Chen Zhenyu, Huang Yinghua, Cao Ling, Jin Feng law, Pan Hui Qing. This standard replaces the standards previously issued as follows:

--- GB/T 15289-1994. General specification for digital storage oscilloscope

1 Scope

GB/T 15289-2013 is the Chinese national standard on general specification for digital storage oscilloscope, 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 31 December 2013 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 15 July 2014.

Classification: ICS 17.220, CCS L85. 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 specifies the digital storage oscilloscope (hereinafter referred to as "scope") terms and definitions, requirements, test methods, inspection rules, marking, packaging, transportation and storage. This standard applies to digital storage oscilloscope.

2 Normative references

The following documents for the application of this document is essential, dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 191 Packaging - Pictorial signs

GB 4793.1-2007 measurement, control and laboratory safety requirements for electrical equipment - Part 1. General requirements

GB/T 6587-2012 General specification for electronic measuring instruments

GB/T 6592-2010 Electrical and electronic measurement equipment - Expression of performance

GB/T 11463-1989 reliability tests for electronic measuring instruments

GB/T 11464 Electronic Measuring Instruments terms

3 Terms and Definitions

GB/T 11464 and defined by the following terms and definitions apply to this document.

3.1 Digital storage oscilloscope digitalstorageoscilloscope The measured electrical signal analog to digital conversion, storage, reprocessing, and then one kind of oscilloscope display. Digital storage oscilloscopes typically should include.

- Input channels;
- Acquisition control and data storage;
- Display device;
- Output interfaces, adapters and other accessories.

3.2 Three-dimensional digital oscilloscope digitalthree-dimensionaloscilloscope Not only can capture and display time signal - amplitude (event) information, but also a different luminance or color-graded display different events Probability of occurrence of digital storage oscilloscope, it usually has a high waveform capture rate.

3.3 input channels

3.3.1 Channel coupling channelcoupling A deterministic signal oscilloscope to observe what kind of pretreatment component. Use the channel coupling can decide which signal component is transmitted To the oscilloscope channel coupling generally have AC (alternating current) coupling, DC (DC) coupling and GND (ground) coupling.