



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

GB/T 15972.10-2021

**Specifications for optical fibre test methods - Part 10:
Measurement methods and test procedures - General and
guidance**

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Foreword

GB/T 15972 "Specifications for Optical Fiber Test Methods" consists of several parts, and its expected structure and corresponding international standards are.

---Part 10.General principles of measurement methods and test procedures (corresponding to IEC 60793-1-1);

---Part 20~Part 29.Measurement methods and test procedures of dimensional parameters (corresponding to IEC 60793-1-20 to IEC 60793-1-29);

---Part 30~Part 39.Measurement methods and test procedures of mechanical properties (corresponding to IEC 60793-1-30 to IEC 60793-1-39);

---Part 40~Part 49.Measurement methods and test procedures of transmission characteristics (corresponding to IEC 60793-1-40 to IEC 60793-1-49);

---Part 50~Part 59.Environmental performance measurement methods and test procedures (corresponding to IEC 60793-1-50 to IEC 60793-1-59).

This part is Part 10 of GB/T 15972.

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

This part replaces GB/T 15972.10-2008 "Specification for Optical Fiber Test Methods Part 10.General Measurement Methods and Test Procedures"

The main technical changes compared with GB/T 15972.10-2008 are as follows.

---In the scope of application, category C single-mode fiber has been added (see Chapter 1);

---Added the amendment rules (see Chapter 4);

---Modified the fiber classification (see Chapter 9, 8.1 and 8.2 of the.2008 edition);

--- Deleted the structure, material and identification mark of the optical fiber (see Chapter 9 of the.2008 edition);

---Modified the packaging requirements (see 12.1, 12.1 of the.2008 edition);

---Modified the optical fiber measurement method (see Appendix A, Appendix A of the.2008 edition).

This part uses the redrafting method to modify and adopt IEC 60793-1-1.2017 ``Optical Fiber Part 1-1.Measurement Methods and Test Procedures

General Provisions.

Compared with IEC 60793-1-1.2017, this part has many structural adjustments. Appendix A lists this part and IEC 60793-1-1.2017.

1-1.Comparison table of.2017 chapter number changes.

The technical differences between this part and IEC 60793-1-1.2017 and the reasons are as follows.

---Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions and adjustments.

The situation is collectively reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows.

* Replace IEC 60793-1-20 with GB/T 15972.20, which is modified to adopt international standards;

* Replace IEC 60793-1-21 with GB/T 15972.21 modified to adopt international standards;

- * Replace IEC 60793-1-22 with GB/T 15972.22, which is modified to adopt international standards;
- * Replace IEC 60793-1-30 with GB/T 15972.30, which is modified to adopt international standards;
- * Replace IEC 60793-1-31 with GB/T 15972.31, which is modified to adopt international standards;
- * Replace IEC 60793-1-32 with GB/T 15972.32 which is modified to adopt international standards;
- * Replace IEC 60793-1-33 with GB/T 15972.33 which is modified to adopt international standards;
- * Replace IEC 60793-1-34 with GB/T 15972.34 which is modified to adopt international standards;
- * Replace IEC 60793-1-40 with GB/T 15972.40 which is modified to adopt international standards;
- * Replace IEC 60793-1-41 with GB/T 15972.41 which is modified to adopt international standards;
- * Replace IEC 60793-1-42 with GB/T 15972.42 which is modified to adopt international standards;
- * Replace IEC 60793-1-43 with GB/T 15972.43, which is modified to adopt international standards;
- * Replace IEC 60793-1-44 with GB/T 15972.44 modified to adopt international standards;
- * Replace IEC 60793-1-45 with GB/T 15972.45 which is modified to adopt international standards;
- * Replace IEC 60793-1-46 with GB/T 15972.46 which is modified to adopt international standards;
- * Replace IEC 60793-1-47 with GB/T 15972.47 which is modified to adopt international standards;
- * Replace IEC 60793-1-48 with non-equivalent adopting international standard GB/T 15972.48;
- * Replace IEC 60793-1-49 with GB/T 15972.49 which is modified to adopt international standards;
- * Replace IEC 60793-1-50 with GB/T 15972.50 which is modified to adopt international standards;

* Replace IEC 60793-1-51 with GB/T 15972.51 which is modified to adopt international standards;

* Replace IEC 60793-1-52 with GB/T 15972.52 which is modified to adopt international standards;

* Replace IEC 60793-1-53 with GB/T 15972.53, which is modified to adopt international standards;

* Replace IEC 60793-1-54 with GB/T 15972.54 which is modified to adopt international standards;

* Added references to GB/T 191, GB/T 4892, GB/T 5048, GB/T 8170, GB/T 9771 (all parts),

GB/T 12357 (all parts), GB/T 14733.12, GB/T 15972.55, GB/T 31242;

* Removed IEC 60793-2.

---Revised the contract amendment rules;

--- Added Chapter 10 "Sample Preparation", 12.2 "Marking" and Appendix B "Optical Fiber Measurement Method".

This section has made the following editorial changes.

--- Modify the standard name to "Specifications for Optical Fiber Test Methods Part 10.General Principles of Measurement Methods and Test Procedures".

1 Scope

This part of GB/T 15972 specifies the general requirements for optical fiber characteristics measurement methods and test procedures, including rounding rules, measurement and test procedures.

Standard atmospheric conditions, calibration criteria, reference test methods, fiber classification, sample preparation, measurement methods and test procedures for inspection classification, measurement and testing

Order, packaging and marking.

This section applies to class A multimode optical fibers, class B single-mode optical fibers, and class C single-mode optical fibers and cables.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is