

ICS 33.180.20

CCS L 50



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

GB/T 18310.28-2026

**Fibre optic interconnecting devices and passive components -
Basic test and measurement procedures - Part 2-28: Tests -
Corrosive atmosphere (sulphur dioxide)**

纤维光学互连器件和无源器件 基本试验和测量程序 第2-28部分：试验 腐蚀性气
氛(二氧化硫)

(English Translation)

Issued on: July 30, 2026

Implemented on: February 1, 2027

Issued by: State Administration for Market Regulation

Table of Contents

Foreword	
Introduction	
1 Scope	
2 Normative references	
4 General Provisions	
5 Device	
6 Procedure	
6.1 General Rules	
6.2 Preprocessing	
6.3 Experiment	
6.4 Recovery	
6.5 Final Inspection and Measurement	
7 Severity Level	
8 Details to be specified	

Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting is scheduled.

GB/T 18309 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices - Part 1: General Principles and Guidelines" GB/T 18310 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices - Part 2: Tests" and GB/T 18311 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices, Part 3: Inspection and Measurement" together constitute the basic test and measurement procedures for fiber optic interconnects and passive devices.

National standard system for testing methods of interconnected and passive devices.

This document is based on GB/T 18310 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices - Part 2: Tests".

Part 2-28 of GB/T 18310 has been published, including the following parts.

--Part 2-2. Testing the durability of the mating;

- Part 2-4. Testing the holding power of optical fibers/cables;
- Part 2-5. Testing Torsion/Twisting;
- Part 2-6. Testing the tensile strength of the locking mechanism;
- Part 2-7. Test Bending Moment;
- Part 2-9. Test Impact;
- Part 2-10. Testing for resistance to compression and load;
- Part 2-11. Test Axial Compression;
- Part 2-12. Test Impact;
- Part 2-14. Experimenting with high light power;
- Part 2-17. Testing at Low Temperatures;
- Part 2-18. Testing Dry Heat-High Temperature Durability;
- Part 2-19. Experiment with constant humidity and heat;
- Part 2-21. Test Temperature-Humidity Combination Cyclic Test;
- Part 2-22. Test Temperature Variation;
- Part 2-23. Testing the seal of non-pressurized junction boxes;
- Part 2-26. Test Salt Spray;
- Part 2-27. Experimental Dust (Laminar Flow);
- Part 2-28. Test Corrosive Atmosphere (Sulfur Dioxide);
- Part 2-35. Testing Optical Cable Nulling;
- Part 2-39. The test's sensitivity to external magnetic fields;
- Part 2-42. Testing the static end load of the connector;
- Part 2-45. Testing water immersion durability;
- Part 2-48. Test temperature and humidity cycle.

This document adopts IEC 61300-2-28:2013 "Fundamental test and measurement procedures for fiber optic interconnect devices and passive devices".

Part 2-28. Test Corrosive Atmosphere (Sulfur Dioxide) this document includes a new chapter on "Terms and Definitions".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the Ministry of Industry and Information Technology of the People's Republic of China.

Introduction

Fiber optic interconnects and passive devices play a vital role in fiber optic products and applications. With the advancement of optical communication technology and manufacturing...

With the continuous emergence of new products, testing and measurement technologies for fiber optic interconnects and passive devices have also developed rapidly. To improve product testing and measurement procedures...

To promote international coordination and trade, the IEC has developed and published the IEC 61300 series of test and measurement procedures standards to date.

It covers the measurement and testing of optical performance, mechanical properties, and environmental adaptability of fiber optic interconnects and passive devices, and is an internationally recognized...

my country has established a standard system for testing and measurement procedures for fiber optic interconnect devices and passive devices, referencing the IEC 61300 series standards.

Including GB/T 18309 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices Part 1: General Principles and Guidelines", GB/T 18310 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices - Part 2: Tests" and GB/T 18311 "Basic Test and Measurement Procedures for Fiber Optic Interconnects and Passive Devices, Part 3: Inspection and Measurement" aims to establish product specifications.

It provides a complete and unified set of methodologies and standards for product testing and verification.

GB/T 18310 is proposed to consist of the following parts.

- Part 2-1. Test Vibrations (Sine). The purpose is to determine the test procedure for vibrations (sine).
- Part 2-2. Testing Mating Durability. The purpose is to determine the testing procedures for mating durability.
- Part 2-4. Testing the Holding Force of Optical Fibers/Cables. The purpose is to determine the test procedures for the holding force of optical fibers/cables.
- Part 2-5. Torsion Testing. The purpose is to determine the testing procedure for torsion.
- Part 2-6. Testing the tensile strength of the locking mechanism. The purpose is to

determine the test procedure for the tensile strength of the locking mechanism.

--Part 2-7.Test Bending Moment. The purpose is to determine the test procedure for bending moment.

--Part 2-9.Test Impact. The purpose is to determine the test procedure for impact.

--Part 2-10.Testing for resistance to compression and load. The purpose is to determine the testing procedures for resistance to compression and load.

--Part 2-11.Testing Axial Compression. The purpose is to determine the test procedure for axial compression.

--Part 2-12.Impact Testing. The purpose is to determine the impact testing procedure.

--Part 2-14.Testing High Optical Power. The purpose is to determine the testing procedure for high optical power.

--Part 2-15.Testing the Torsional Strength of the Locking Mechanism. The purpose is to determine the test procedure for the torsional strength of the locking mechanism.

--Part 2-17.Testing at Low Temperatures. The purpose is to determine the testing procedures for low temperatures.

--Part 2-19.Testing under constant humidity and heat. The purpose is to determine the testing procedure for constant humidity and heat.

--Part 2-21.Test Temperature-Humidity Combination Cyclic Test. The purpose is to determine the test procedure for the temperature-humidity combination cycle.

--Part 2-22.Testing Temperature Changes. The purpose is to determine the testing procedures for temperature changes.

--Part 2-23.Testing the seal of non-pressurized junction boxes. The purpose is to determine the testing procedure for the seal of non-pressurized junction boxes.

--Part 2-24.Screening test of open ceramic centering sleeve by applying stress. The purpose is to determine the stress applied...

Test procedure for screening open-type ceramic centering sleeves under stress.

--Part 2-26.Salt Spray Test. The purpose is to determine the salt spray test procedure.

--Part 2-27.Test Dust (Laminar Flow). The purpose is to determine the test procedure for dust (laminar flow).

--Part 2-28.Testing Corrosive Atmospheres (Sulfur Dioxide). The purpose is to determine the testing methods for corrosive atmospheres (sulfur dioxide).

program.