# Huawei A51 Optical Module Parameters



## Overview

How to View Optical Module Parameters If an optical module is installed in a running router, you can run the display transceiver command to view parameters.

## Key Takeaways

The Huawei A51 optical module is a 100G coherent DWDM OTN module designed for high-speed, long-distance transmission with full diagnostic monitoring capabilities.

### Key Specifications

Module Type: 100G wavelength division OTN optical module, coherent DWDM (Dense Wavelength Division Multiplexing) compatible, model TN12C1CFPA51-03033JRX. Transmission Rate: 100 Gigabit per second (100G) for high-capacity networks. Fiber Type: Single-mode fiber (SMF), optimized for long-distance optical transmission.

Wavelength: Supports DWDM channels; exact center wavelength depends on the specific channel configuration. Transmission Distance: Designed for long-haul applications; typical distances can range from tens to hundreds of kilometers depending on fiber type and network design. Connector Type: LC connectors are commonly used for Huawei optical modules.

Digital Diagnostic Monitoring (DDM): Yes, the module supports real-time monitoring of temperature, voltage, bias current, and optical power levels. Receive Optical Power (Rx): Monitored in dBm; thresholds are configurable, e.g., default high/low thresholds for Rx power are typically around 1. 00 dBm and -11.

90 dBm. Transmit Optical Power (Tx): Monitored in dBm; default high/low thresholds are typically around 1. 00 dBm and -9.

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30 dBm. Vendor and Certification: Huawei-certified modules ensure compatibility with Huawei switches and routers; non-certified modules may trigger alarms or be unsupported. Manufacturing Information: Includes serial number, manufacturing date, and vendor details for traceability.

### Viewing and Monitoring Parameters

To check the parameters of a Huawei A51 optical module installed in a device: Use the command display transceiver to view all optical ports. Use display transceiver interface interface-type interface-number to view a specific port's module information. For detailed diagnostic data, add the verbose parameter: display transceiver interface interface-type interface-number verbose.

Parameters available include wavelength, transmission distance, fiber type, current Rx/Tx power, temperature, voltage, and bias current. These features allow network engineers to monitor module health, ensure proper operation, and troubleshoot optical link issues efficiently.

### Summary

The Huawei A51 optical module is a high-performance 100G DWDM OTN module suitable for long-distance single-mode fiber networks. It provides full digital diagnostic monitoring, configurable power thresholds, and is fully certified for Huawei equipment, making it ideal for high-speed backbone and metro network deployments.

## Article Content

How to View Optical Module Parameters

If an optical module is installed in a running router, you can run the display transceiver command to view parameters of the optical module, including the center wavelength, transmission distance, fiber types

What Is an Optical Module and Its FAQs (V200)

What Is an Optical Module and Its FAQs (V200) Describes what an optical module is and FAQs, including the fundamentals, appearance and structure, key performance counters, common types,

Huawei Switches Viewing Optical Port Receiving and Sending

Use the command display transceiver to view the optical module information of all optical ports, and use the command display transceiver interface interface-type interface-number to view the

01-10 OPTICAL MODULES

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If an optical module is installed in a running device, you can run the display transceiver command to view parameters of the optical module, including the center wavelength, transmission distance, fiber

Huawei 100G wavelength division OTN optical module Huawei A51 ...

Huawei 100G wavelength division OTN optical module Huawei A51 TN12C1CFPA51 03033JRX Wavelength division 100G coherent optical module 100G-DWDM-C ext -A51-SM-TCFP Our company

Teach you to read the DDM information of the optical module on the ...

The following picture is the optical module information queried on the Huawei switch, which is marked with the Chinese translation of the Optical Module English parameters for easy

How To View Optical Transceiver Information On Huawei Switches

Optical transceivers are widely applied in switches, network cards, routers and other communication devices. Checking transceiver parameters allows users to monitor real-time

OPTICAL MODULES FOR HUAWEI S SERIES SWITCHES

A switch must use optical or copper modules that have been certified for use on Huawei switches. Non-certified optical or copper modules cannot ensure transmission reliability and may affect service

Troubleshooting for Optical Modules on Huawei Switch

Check whether single-mode or multi-mode optical modules are used and whether the optical jumper type matches the transceiver modules. Run the display

Introduction of Optical Modules on Huawei Switches

If an optical module is installed in a running switch, you can run the display transceiver command to view parameters of the optical module, including the center wavelength, ...

Understanding Optical Modules

If an optical module is installed in a running device, you can run the display transceiver command to view parameters of the optical module, including the center wavelength, transmission distance, fiber

Checking Parameter Settings of the Optical Modules

Check the parameter settings such as rate, wavelength, and transmission distance of the interconnected optical modules. Using the optical modules from the same vendor is recommended.

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Displaying Optical Module Information

Displaying Optical Module Information You can use the display commands to view information about the optical module on an interface, including conventional information,

Displaying Optical Module Information

What Is the Impact of Using Non-Huawei-Certified Optical Modules? Huawei-certified optical modules have been tested to the highest standards to ensure their quality. Tests include the installation and

How to View Optical Module Parameters

Using a Command If an optical module is installed in a running device, you can run the display interface transceiver command to view parameters of the optical module, including the center

Understanding Optical Modules

40GE QSFP+ Optical Modules 100GE QSFP28 Optical Modules Understanding Optical Modules What Is an Optical Module Parameter Description How to View Optical Module Parameters Rules for

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