

# Does the dual-channel optical module have separate transceiver



## Overview

Internally, the module contains two separate transmitter/receiver pairs with integrated WDM filters. Each pair operates at 1490 nm and 1310 nm on its own fibre, allowing two full-duplex data channels to run through a single compact module. Enables full-duplex communication over dual fibers or bidirectional (BIDI) transmission over a single fiber using different wavelengths. Allows modules to be inserted or. The Cisco QSFP 100-Gb SR1. 2 Bi-Directional (BiDi) transceiver is a pluggable optical transceiver with a duplex LC connector interface for short-reach data communication and interconnect applications using Multi-Mode Fiber (MMF). Built as a dual-channel RS232 transceiver, this little module bridges the gap between TTL devices (like Arduinos or ESP32s) and RS232 gear (think old printers, industrial sensors, or PCs with DB9 ports). The dual Far Reach 8-channel (2xFR4) design uses 100G-PAM4 electrical and optical modulation based on the CWDM4 serial, multiplexed 1310nm wavelength grid.

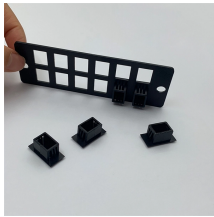
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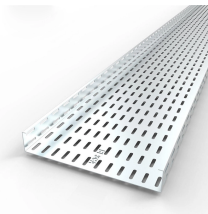
The CP-124MCMC-E CSFP dual transceiver is designed for high-density fibre-optic networks that require maximum port efficiency in space-constrained systems. It fits into a standard SFP slot but ...



Dual fiber modules use two separate fibers: one for transmitting (TX) and one for receiving (RX). This is the most common setup and is widely ...



These transmitters are fully compliant with the IEEE Gigabit Ethernet and 1x Fiber Channel standards but can be used for any other data communications purpose within their operating parameters.



To transmit and receive optical signals over multiple channel wavelengths, the OLT in a WDM-PON may include a multi-channel transmitter optical subassembly (TOSA) and a multi-channel...



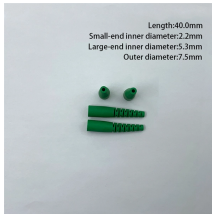
Built as a dual-channel RS232 transceiver, this little module bridges the gap between TTL devices (like Arduinos or ESP32s) and RS232 gear (think old printers, industrial sensors, or PCs with ...



It has a maximum fiber reach of 2,000-meters which assumes two optical patch panels in the link. The transceiver firmware supports both InfiniBand and Ethernet and is automatically enabled depending ...



Read the definitive 2026 guide on SFP modules. We explain Single Mode vs Multimode, DDM diagnostics, and how to choose the right transceiver for Cisco, Juniper, and more.



The DSP also serves as a clock and data recovery (CDR) unit, and each channel operates at a wavelength of 1310nm, requiring a separate optical fiber for each channel, totaling 8 fibers.



Dual fiber modules use two separate fibers: one for transmitting (TX) and one for receiving (RX). This is the most common setup and is widely supported in standard optical networking.



Each Cisco QSFP 100-Gbps SR1.2 BiDi transceiver consists of two transmit and receive channels in the 832-918 nanometer wavelength range, enabling an aggregated 100-Gbps link over a ...



The CWDM optical module adopts CWDM technology, which can combine optical signals of different wavelengths through an external wavelength division multiplexer and transmit ...

## Contact Us

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