Price of one- and three-centimeter optical transceivers used in broadcasting



Overview

Transceivers for Optical Communication Market 2025Transceivers for Optical Communication Market size was valued at US$ 12.4 billion in 2024 and is projecte.

Key Takeaways

Optical transceivers in small form factors (1–3 cm) typically range from $5 to $120 per unit, depending on brand, speed, and reach. Pricing OverviewShort-reach optical transceivers commonly used in broadcasting, such as 1G SFPs or 10G SFP+ modules, are available in compact sizes around one to three centimeters. Their prices vary significantly based on whether they are OEM-branded (Cisco, HPE, Juniper) or compatible third-party modules: Generic/compatible 1G SFPs: $5–$25 per unit, suitable for short-distance enterprise or broadcasting links.

OEM-branded 1G SFPs: $60–$120+, often including industrial or extended-temperature specifications. 10G SFP+ short-range modules: Tens of dollars for compatible units, while OEM or long-reach versions can cost several hundred dollars. The size of the module (1–3 cm) generally corresponds to SFP or SFP+ form factors, which are widely used in broadcasting for fiber optic links due to their compact footprint and ease of integration into racks and network equipment.

Factors Affecting Price

Brand and Warranty: OEM modules command higher prices due to guaranteed compatibility and support. Reach and Wavelength: Short-range (SR) modules are cheaper than long-range (LR/ER) modules. Speed: Higher-speed modules (10G, 25G, 40G) cost more than 1G units.

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Special Features: Industrial temperature tolerance, low power consumption, or enhanced reliability increase cost.

Market Trends

The optical transceiver market has seen declining prices for standard modules due to technological advances and increased competition, while high-speed or specialized modules remain relatively stable. The market is expected to continue growing, driven by broadcasting, data centers, and telecom infrastructure expansion. In summary, for broadcasting applications using 1–3 cm optical transceivers, expect $5–$25 for generic 1G units and $60–$120+ for OEM-branded modules, with higher-speed or long-reach modules costing more depending on specifications and vendor.

Article Content

Transceivers for Optical Communication Market 2025

Transceivers for Optical Communication Market size was valued at US$ 12.4 billion in 2024 and is projected to reach US$ 23.6 billion by 2032, at a CAGR of 9.6%

Optical Transceiver Market Insights and Growth Report 2026

What Is The Optical Transceiver Market Size and Share 2026? The optical transceiver market size has grown rapidly in recent years. It will grow from $12.75 billion in 2025 to $14.85 billion in 2026 at a

Analyze The Cost Structure Of Optical Transceivers: Understand The ...

Understanding the cost structure of optical transceivers is an important factor in understanding the price. This article analyzes the cost structure of optical transceivers in detail, including material costs,

Optics and Transceivers | Fiber Optical Transceivers

FS offers a growing portfolio of optical transceivers, with speed range from 100M, 1G, 10G, 25G, 40G, 50G, 100G, 200G, 400G to 800G and beyond. The fiber optic transceiver modules can work in any

Optical Transceiver Price Trend and Market Analysis

This article analyzes the price trend and market analysis of the current optical transceiver market. Generally speaking, the price decline trend of the optical transceiver market will tend to be stable,

Telecom Transceivers – pluggable modules, fiber-optic networks,

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This article introduces optical telecom transceivers — modules that integrate a transmitter (TOSA) and receiver (ROSA) to provide the complete physical-layer interface for fiber-optic and free-space links.

Optical Transceiver Modules Prices & Specifications

Optical Transceiver Modules/SFP, also called fiber optic transceiver or optical transceiver, is a typically hot-pluggable device used in high-bandwidth data communications applications.

Optical Transceivers for Datacom and Telecom Analysis 2026 and ...

The size of the Optical Transceivers for Datacom and Telecom market was valued at USD XXX million in 2024 and is projected to reach USD XXX million by 2033, with an expected CAGR of

Optical Transceiver Market Size, Share, Analysis 2030

Optical transceivers with an operational range of less than 1 km held the largest market share in 2023 and are expected to continue dominating the market throughout the forecast period.

LightCounting :: The TOP10 Transceiver Suppliers for 2024

Demand for optics picked up in 2020-2021 and shortages across the supply chain helped to stabilize prices (similar to the situation in 2016-2017 and 2023-2024).

Optical Transceiver Companies

Cisco Systems, Inc. offers optical transceiver modules used in various networking applications, ranging from campus to data centers to service provider networks. Its pluggable optics innovation,

Analyze The Cost Structure Of Optical Transceivers: Understand The ...

Summary: This article analyzes the cost components of optical transceivers, including material costs, manufacturing costs, R&D costs, and market costs. Understanding the cost structure of optical

What is a transceiver and how does it work?

What is a transceiver? A transceiver is a combination transmitter/receiver in a single package. While the term typically applies to wireless communications devices, it can also be used for

Transceiver

Analog transceivers use frequency modulation to send and receive data; however, any analog modulation scheme can be used (e.g. amplitude modulation or single-sideband modulation).

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Optical Transceiver Market: Top 10 Manufacturers Ranked

Optical transceiver market leaders: the top 10 manufacturers powering 400G and 800G modules for hyperscale data centers and AI networking.

Transceivers: Functions, Types, & Applications Overview

Explore the world of transceivers! Learn about their diverse functions, types & understand their broad applications in modern technology.

The FOA Reference For Fiber Optics

They consist of a transmitter on one end of a fiber and a receiver on the other end. Most systems operate by transmitting in one direction on one fiber and in the reverse direction on another fiber for

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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