

40G optical module bit rate



Overview

40GE is defined in IEEE802.3ba, the bit rate is 40.32 Gbps. The Cisco® 40GBASE QSFP (Quad Small Form-Factor Pluggable) portfolio offers customers a wide variety of high-density and low-power 40 Gigabit Ethernet connectivity options for data center, high-performance computing networks, enterprise core and distribution layers, and service provider. 40GE is defined in IEEE802.3ba. The tri-rate module. QSFP data rate ranges from 40G to 800G depending on the module generation. In simple terms, QSFP is not a single speed standard—it is a scalable transceiver form factor used in data centers and telecom networks. The module converts 4 input channels (ch) of 10Gb/s electrical data to 4 CWDM optical signals, and multiplexes. The 40 Gbit/s QSFP+ optical modules can only be used with 40 GE interfaces. Transmission distances can be 0.



Article Content

Cisco 40GBASE QSFP Modules Data Sheet

Note: All Cisco QSFP modules and cables exceed IEEE specifications, guaranteeing a link Bit-Error Rate (BER) better than 1E-15 with some exceptions: QSFP-40G-CSR-S guarantees a

QSFP-40/100-SRBD_100G SRBD_QSFP Module

USource 40G/100G QSFP28 BIDI supports multi rate 40Gb/s and 100Gb/s bit rates. This Bi-Direction optical module is 100% compatible with CISCO QSFP-40/100

Understanding the Cisco QSFP 40G: Everything You Need to

Discover all you need to know about the powerful Cisco QSFP 40G transceiver module for high-density, low-power 40 Gigabit Ethernet connectivity in data centers and networks.

40 Gbit/s QSFP+ Optical Modules

The 40 Gbit/s QSFP+ optical modules can only be used with 40 GE interfaces. The wavelength of these 40 Gbit/s QSFP+ optical modules can be 850 nm, or 1310 nm-center multiple wavelength ranges.

Optical Transceiver Speeds Guide: 1G, 10G, 25G, 40G,

Today, many organizations skip 40G in new designs because 100G built from 4×25G or native 100G optics gives better long-term density and cost per bit. Still, if you're

QSFP-40G-ER4 Demystified: Your Guide to 40Gbps

The QSFP-40G-ER4 (Quad Small Form-factor Pluggable 40G Extended Reach) is a hot-swappable, optical fiber transceiver module. It's

40G vs. 100G BiDi Transceivers, What is The Difference

40G and 100G BiDi optical modules As data traffic grows, the growing demand for higher capacity and superior bandwidth performance in data centers and IT

Optical Transceiver Speeds Guide: 1G, 10G, 25G, 40G,

WOLON ships a full suite of factory-tested transceivers and cabling to match these needs: SFP/SFP+ for 1G/10G, SFP28 for 25G, QSFP+ and QSFP28 for

LR4 40G QSFP+ Transceiver 1310nm 10km SMF Fiber Transceiver Module

40G QSFP+ LR4 1310nm 10km SMF Fiber Transceiver Module Description This product is a transceiver module designed for 2m-10km optical communication applications. The design is compliant to

QSFP-40G-ER4 Compatible 40G QSFP+ Transceiver 1310NM 40KM

QSFP-40G-ER4 Compatible 40G QSFP+ Transceiver 1310NM 40KM DOM Dual LC
Product Description Gezhi QSFP+-40G-ER4 is designed for data center and Enterprise wide-area interconnection. This

Optical Modules Market Research Report 2034

Optical Modules Market Outlook 2025-2034 The global optical modules market was valued at \$14.8 billion in 2025 and is projected to reach \$39.6 billion by 2034,

40G Optical Transceivers and Cables Portfolio | FS

40GBASE Optical Transceivers and Cables Portfolio Product Overview The 40G transceiver module portfolio offers customers a wide variety of high-density and low-power 40 Gigabit Ethernet

40G Serial Module Technical Requirements

An IEEE 802.3 Ethernet 40Gb/s serial PHY provides optical compatibility with existing carrier 40Gb/s client interfaces and potential 40Gb/s client interfaces (e.g., OTU3/OTU3e2/STM-256/OC-768/40G

40GBASE-UNIV QSFP+ 1310nm 2km Transceiver Datasheet | FS

40G QSFP+ transceiver module is individually tested on corresponding equipment such as Cisco, Arista, Juniper, Dell, Brocade and other brands, and passes the monitoring of FS intelligent quality

The Difference Between a 10G and 40G Optical

In this article we compare the differences between a 10G and 40G optical transceiver, including the benefits and disadvantages of both.

Your Guide to 40GbE and 100GbE Optics

Current multi-mode optics standards for 40GbE and 100GbE optics use multiple 10Gbps lasers, simultaneously transmitting across multiple fiber strands to achieve high data rates. Because

Pluggable Optical Module Market Research Report 2034

The pluggable optical module market was valued at \$9.8 billion in 2025 and is projected to reach \$26.4 billion by 2034, growing at a CAGR of 11.6%.

What Are the Key Parameters of Optical Modules

Understand the key parameters of optical modules, including transmission rate, distance, wavelength, and fiber compatibility, for better network

40G Optical Transceiver Modules | Broadex Technologies

Broadex Technologies" high performance and cost effective 40G Optical Transceiver Modules are built utilizing our innovative COB technology. These reliable and

In-Depth Guide to 40G QSFP+ Optical Modules, DAC,

For the 40G SR4 QSFP+ optical module, it adopts the 802.ba D3.2 standard, which defines the 40GBASE-SR4 module to use MPO/MTP connectors for 40G data

Choosing the Right 40G QSFP+ Transceiver: Maximize Network

Maximize your network's potential with the right 40G QSFP+ transceiver. From transmission distance to interface types, discover essential tips for choosing the right module.

AOC, DAC, ACC, AEC Modules: The most Complete

Understand AOC, DAC, ACC & AEC modules in one guide. Compare features, benefits & best use cases to choose the right cable for your data center.

Finisar-FTL4C1QE1C-40GBASE-LR4-QSFP+-Optical-Transceiver

Finisar's FTL4C1QE1C QSFP+ transceiver modules are designed for use in 40 Gigabit Ethernet links over single mode fiber. They are compliant with the QSFP+ MSA1,2 and IEEE 802.3ba 40GBASE

In-Depth Guide to 40G QSFP+ Optical Modules, DAC,

40G optical modules are increasingly widely used in data centers. 40G optical modules can reach up to 40Gbps to help data centers relieve operational

40G QSFP+ Optical Transceivers Complete Guide

How 40G QSFP+ optical transceivers boost performance in data centers and telecom networks. Learn about types, use cases, and cost-saving benefits.

QSFP Data Rate Explained: 40G to 800G Speed Guide

Understand QSFP data rate from 40G to 800G, including QSFP+, QSFP28, and QSFP-DD. Compare speeds, lane structure, and choose the right module.

QSFP+ 40G SR4 Transceiver: The Workhorse of 40

In essence, a QSFP+ 40G SR4 is a hot-swappable, compact optical module that plugs into a switch, router, or network interface card. It converts

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.invest-bud.com.pl>

Email: sales@ibud-photonics.com

Phone: +33 1 45 62 89 07

Address: 10 Avenue des Champs-Élysées, 75008 Paris, France

This document is for informational purposes only. Specifications subject to change without notice.

