

Selection Guide for CFP810G in Backbone Networks



Article Overview

CFP810G modules are high-speed optical transceivers designed for 100G Ethernet backbone links, supporting long-distance, high-bandwidth communication with multiple deployment options.

Overview of CFP810G Modules

CFP810G is part of the CFP8 family, optimized for 100 Gigabit Ethernet (100G) backbone networks. These modules convert electrical signals from network devices into optical signals for transmission over fiber, and vice versa, enabling high-speed, low-loss communication over long distances . CFP810G modules are hot-swappable, allowing easy replacement without disrupting network operations .

Key Selection Criteria

1. Link Distance and Fiber Type

- Short-range (SR): Supports distances up to 100-150 meters over laser-optimized multimode fiber (OM3/OM4) using MPO/MTP-24 connectors .
 - Long-range (LR/ER): Supports distances from 10 km (LR4) up to 40 km (ER4) over single-mode fiber (SMF, G.652) with SC/PC connectors .
 - Choose the module based on the physical separation of backbone nodes and fiber infrastructure.
- #### 2. Channel and Data Rate
- CFP810G supports 8 high-speed channels at 28 Gb/s per channel, providing a tota...

Article Content

Unit 7: Backbone Networks

Routed backbones are commonly used in larger networks, including enterprise networks, where network segmentation, security, and

Backbone connectivity for Digital Global Gateways

High-quality backbone connectivity is essential to the performance and resilience of electronic communications networks.

10GB XFP Transceiver Compatibility Guide for 10G Networks

This guide is designed to help network engineers, IT buyers, and system integrators clearly understand how XFP compatibility works

Cisco Switch Selection Guide for Enterprise Campus Networks

Select Cisco campus switches by network role first, then by model. Access switch selection depends on endpoint count,

Handbook Optical fibres, cables and systems

In parallel with the above stated developments of the DWDM systems for the backbone network, passive optical networks (PON)

Backbones-Review: Feature Extraction Networks for Deep Learning

A backbone is the recognized architecture or network used for feature extraction and its trained in many other task before and

Structured cabling

Backbone cabling is the inter-building and intra-building cable connections in structured cabling between entrance facilities,

Review article Backbones-review: Feature extractor networks for deep ...

Many networks have been proposed and become famous networks used for any DL models in any AI task. These

Backbone Selection

“Backbone” is a nickname for a plasmid. If you want a plasmid, there's no better place to shop around than AddGene. This page will

A Guide to 800G Optical Module Form Factors

Whether for hyperscale data centers or global telecom networks, selecting the right optical module form factor is key

Backbone in networking

Backbone in networking is the part of your network that ties different departmental networks into a single whole. The

Users Guide To Fiber Optic System Design and Installation

CATV systems have been converted to fiber optic backbones which allow voice and data transmission using cable modems in addition

Network Backbone: Planning and Sizing the Passive Infrastructure for ...

Optical Fiber Fiber selection in the backbone must consider distance, bandwidth, and network architecture. OM1 and

Structured Cabling: Backbone Cabling vs Horizontal Cabling

Structured cabling provides a standardized and scalable network infrastructure that connects equipment rooms,

Fiber Optic Backbone Planning and Design | Corning

Creating a well-planned fiber optic backbone design for your network infrastructure is what we do. We are here to ensure that you

Fiber Optic Backbone Design Guidelines | PDF | Optical Fiber | Network ...

The document outlines design guidelines for a fiber optic cabling backbone project for power companies. It recommends determining

Backbone Cabling: Top 10 Essential Facts in 2024

Discover the essentials of backbone cabling. Learn its types, installation tips, and how it differs from horizontal cabling.

Fiber Optic Backbone Network Infrastructure

Corning's provides an integrated fiber optic backbone solution that provides easy fast installation and turnup times with outstanding

Cisco 8100 Series Secure Routers Data Sheet

Cisco 8100 Series Secure Routers offer simplified, secure networking with advanced SoC technology, robust security,

10G to 800G Cabling Guide For DELL Optical Transceivers

This Cabling Guide will discuss the different available fiber optic connectivity to work with 10G, 25G, 40G, 100G, 200G, 400G and

Understanding Basic 802.1ah Provider Backbone Bridge

This encapsulate frame uses backbone vlan to reach its destination. Which backbone vlan will be used to forward the

Internet backbone - what is it? | Arelion

Internet backbone is the high-capacity network infrastructure that forms the core of the Internet, facilitating

Hospital-grade CFP810G Selection Guide

Application and Selection Guide for Medical-Grade Air Filters Medical-grade air filter application and selection guide covering

What is the Internet Backbone?

Conclusion The Internet backbone is the critical infrastructure that ensures rapid, dependable, and worldwide Internet

What is Backbone Cabling? A Wiring Infrastructure Guide

What is backbone cabling? We have the answers you need, including when to use backbone cabling and how it

Backbone network

A backbone network or core network is a part of a computer network which interconnects networks, providing a path for the

The Ultimate Guide to Fiber Optic Cables - Types, Standards, and ...

Choosing the right fiber optic cables ensures your network is fast, reliable, and ready for the future. Link-PP delivers

SFP Transceiver Module Selection for Enterprise Gigabit Network

This comprehensive guide covers everything network engineers and IT managers need to know about choosing SFP modules that

Fusion Splicer Buyer's Guide 2026 | Heather Tech

This guide gives network engineers, procurement officers, and IT managers the technical framework to make a defensible

CFP Optical Module: Complete Guide, Types, and 100G Use Cases

Selecting the right CFP optical module is not just about choosing a 100G transceiver —it's about aligning technical

Understanding the Difference Between CFP, CFP2, CFP4, and CFP8

From CFP to CFP8, each generation represents a major step forward in data rate, power efficiency, and port density.

10G SFP+ Module: Complete Selection & Deployment Guide

This article provides a clear, technically accurate overview of 10G SFP+ modules, focusing on how different types compare, how to

Cisco Switch Selector

Catalyst 6500 Series Switches 1/10 Gbps port types 360-Tbps switching capacity
Cisco DNA/SD-Access ready, LW Get resiliency,

What Is Backbone Network? The Simple Guide

At the core of this connectivity lies the backbone network the central nervous system of the internet and large

Contact Us

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