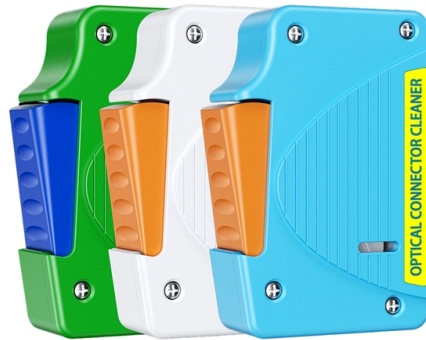


Optical Module Layer 3 Switch



AI Overview

Layer 3 switches with optical modules provide high-speed fiber connectivity, advanced routing, and flexible management for enterprise and data center networks.

Key Features of L3 Optical Switches

Port Configurations and Optical Support: Modern L3 switches often include a mix of 1G, 10G SFP/SFP+, and 100G QSFP28 ports, allowing connection to fiber-based devices such as servers, IP cameras, and wireless access points. For example, the S5710-28SX offers 24 x 1G SFP ports, 4 x 1G combo ports, and 4 x 10G SFP+ uplinks, supporting a wide range of optical modules from different vendors for flexible deployment. High-density switches like the SODOLA 24-port L3 switch provide 24 x 10G SFP+ and 2 x 100G QSFP28 ports, with port splitting capabilities for 25G interfaces. **Layer 3 Routing and Protocols:** These switches support IPv4/IPv6 dual-stack routing, static routing, and dynamic protocols such as RIP, OSPF, BGP, and VRRP. They also handle multicast routing (IGMP, MLD, PIM-DM, PIM-SM) and link aggregation, enabling efficient traffic management and redundancy. **Management and Security:** L3 optical switches provide multi-method management including Web GUI, CLI, Telnet, SSH, and SNMP. Security features include ACLs at port, VLAN, and IP levels, integration with RADIUS/TACACS+, DHCP attack protection, and storm suppression. Some models also include Digital Diagnostic Monitoring (DDM) for real-time monitoring of optical module parameters like temperature, voltage, and optical power. **High Availability and Redundancy:** Enterprise-grade switches often feature hot-swappable power supplies and fans, virtual or physical stacking, and support for STP/RSTP/MSTP/ERPS/LACP, ensuring minimal downtime and network resilience. **Performance and Use Cases:** These switches deliver wire-speed forwarding with low...

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Optical module

An optical module is a typically hot-pluggable optical transceiver used in high-bandwidth data communications applications. Optical

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Layer 2, Layer 3, and Layer 4 Switches

Therefore, Layer 2 switches are used to provide cheap and easy workgroup connectivity, and Layer 3 switches are used to segment

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20 x SFP+ ports 4 x 10GBASE-T/SFP+ Combo ports Physical stacking with up to 4 devices per stack Layer 2+ static routing /

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Layer 3 Switches

A Layer 3 switch is a networking device that operates at the network layer (Layer 3) of the OSI model. Unlike traditional Layer 2

Contact Us

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