

Core Network Switch 48 ports



Summary of Content

A 48-port core network switch can serve as a high-performance aggregation or core device if it supports Layer 3 routing, high-speed uplinks, and enterprise-grade features.

Core vs Access Deployment

While 48-port switches are common in access or edge layers, their use as a core switch depends on throughput and network design. For large-scale data centers, modular chassis or spine-leaf architectures are preferred, but for smaller data centers, branch offices, or specific aggregation zones, a 48-port switch with high-speed uplinks can efficiently handle core traffic .

Key Features to Consider

- **Port Speed and Type:** Core switches often include 10Gb, 25Gb, 40Gb, or 100Gb uplinks. For example, the Extreme 7520 offers 48 x 1Gb/10Gb or 48 x 1Gb/10Gb/25Gb SFP28 ports with multiple 40Gb/100Gb QSFP28 uplinks . Cisco Catalyst 9500X supports 50Gb to 400Gb Ethernet for high-throughput enterprise cores .
- **Layer 3 Routing:** Core switches should support advanced Layer 3 features, including static routing, OSPF, BGP, MPLS, and VPNs. Cisco Catalyst 9500 and Ruijie RG-NBS5200 provide full Layer 3 capabilities .
- **Redundancy and High Availability:** Enterprise core switches often include redundant power supplies, fans, and StackWise or virtual chassis support to ensure uptime .
- **PoE Support:** Some 48-port switches, like the Ruijie RG-NBS5200, offer PoE for powering devices, but core switches typically prioritize throughput over PoE .

Article Content

Cisco Catalyst 9300 Series Switches Data Sheet

Highest number of Multigigabit ports: With standalone and StackWise-1T, Catalyst 9300X models enable 48

Best 48-Port Network Switch in 2026: Tested and Reviewed

In this guide, we've tested and reviewed the best 48-port network switch on the market to help you find the right one for

48 Port Switches — Streamline Your Network Infrastructure

Scale your infrastructure fast with our 48 port switches featuring PoE and SFP uplinks. Choose from managed and unmanaged

7520 | Extreme Networks

The Extreme 7520 are purpose-built 48-port 10Gb and 48-port 25Gb switches designed for high-performance aggregation and core

Meraki MS130-48

The MS130-48 cloud-managed 48 GbE network switch is optimized for medium to large campuses with Wi-Fi and IoT deployments.

TL-SG1048 | 48-Port Gigabit Rackmount Switch | TP-Link

The 48-Port Gigabit Switch TL-SG1048 is designed to meet the needs of the most demanding workgroup and departmental

48 ports network switch, 48 ports ethernet switch

Find your 48 ports network switch easily amongst the 71 products from the leading brands (Zhejiang Dahua Technology, Huawei,

Vollständig verwaltete Switches M4300-48X

Entdecke den NETGEAR XSM4348CS - stapelbarer Managed Switch mit 48 Kupfer-Ports mit 100M/1G/10G-Geschwindigkeiten (48

48 Port Switches

Explore a wide selection of 48 port switches to find the right fit for your networking needs and ensure seamless communication

48 Port Switches | Lanmus | Your Global Partner for Network Devices

A 48-port switch is a high-capacity networking device designed to connect as many as 48 wired devices within a single network. It

Contact Us

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