

Aggregation Switch Capacity



AI Overview

Aggregation switch switching capacity is the total throughput a switch can handle across all ports simultaneously, often measured in Gbps or Tbps.

Understanding Switching Capacity

Switching capacity (also called backplane capacity or fabric capacity) represents the maximum amount of data an aggregation switch can process at full duplex across all its ports without congestion. It is a critical metric for network performance, especially in enterprise and data center environments where multiple access switches feed traffic into the aggregation layer. Aggregation switches consolidate traffic from multiple access switches and forward it to the core network. Their switching capacity must be sufficient to handle peak traffic from all connected devices simultaneously, ensuring low latency and avoiding bottlenecks.

Typical Switching Capacities

- Medium-sized aggregation switches: Often provide 1-10 Gbps per port, with total switching capacities ranging from hundreds of Gbps. For example, the Grandstream GWN7830 series supports up to 24 SFP ports and 12 SFP+ ports, designed for high-performance networks with maximum capacity.
- High-capacity aggregation switches: Designed for large enterprises or data centers, these switches can handle multi-terabit switching capacity. For instance, the FS-2048F offers 4000 Gbps (4 Tbps) switching capacity with 48x 25G SFP28 ports and 8x 100G QSFP28 ports.
- Enterprise campus aggregation: Ubiquiti's USW-Pro-Aggregation switch supports h...

Article Content

Feb 10, 2026

Aggregation Network Switches | Grandstream Networks

Layer 3 aggregation switches that allow enterprises to build scalable, secure, high performance and smart business networks that

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What is an Aggregate Switch?

An aggregate switch is a high-capacity network switch that consolidates connections from multiple access switches,

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What Is an Aggregation Switch and How to Choose?

An aggregation switch is a network device that consolidates traffic from multiple access switches, wireless access

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Port Aggregation Configurations

Port Aggregation Port aggregation allows you to group multiple physical ports into one unit. Port aggregation is useful for

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Aggregation Switch

An Aggregation or "Top-of-Rack" switch is designed to connect everything in a rack at high speeds, then have an even bigger pipe

Jul 20, 2026

UBIQUITI UniF Aggregation Switch Pro, 28-Port 10G SFP+ & 4

Product Description UniFi Pro Aggregation Switch The Switch Pro Aggregation is a fully managed, Layer 3 switch with (28) 10G

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Understanding Switch Aggregation: A Comprehensive

In the context of network architecture, switch aggregation is an essential element,

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UniFi Hi-Capacity Aggregation

A 32-port, Layer 3 switch made for high-capacity 10G SFP+ and 25G SFP28 connections.

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Switch Enterprise Campus Aggregation

1.8 Tbps high-density 100G/25G Layer 3 Etherlighting™ aggregation switch with MC-LAG support for high

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Switch Aggregation

Enterprise Campus Aggregation Pro XG Aggregation Aggregation Hi-Capacity Aggregation

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Ubiquiti Store

Pro XG Aggregation USW-Pro-XG-Aggregation Professional-grade 32-port, Layer 3 Etherlighting™ switch for high-capacity 25G

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Which Aggregation Switch to Choose?

In-depth discussion of the key role and selection points of aggregation switches in network architecture, and

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Data Center Design: Basic 3 Layers, Core, Aggregation, and Access

Want A High Performance, We Need Consider More. A flexible data center design requires solid initial planning and

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What Is an Aggregation Switch and How to Choose?

Discover the role of aggregation switches. Explore differences between aggregation, access, and core switches, and

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What Is The Switching Capacity Of A Network Switch?

Understanding the switching capacity of a network switch is essential for network administrators, IT professionals,

May 20, 2026

What is an Aggregation Switch? | Features and Practical Benefits

In terms of performance and switching speed, aggregation switches typically outperform access switches. They can

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Capacity Planning

The Campus Reference Architectures section describes how to select HPE Aruba Networking compatible products to

Jan 21, 2026

Ubiquiti UniFi Hi-Capacity Aggregation (USW-Pro-Aggregation)

Ubiquiti UniFi USW-Pro-Aggregation : Switch 28 SFP+ ports + 4 SFP28 ports The Ubiquiti UniFi Hi-Capacity Aggregation (USW-Pro

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Switch Hi-Capacity Aggregation

A 32-port, Layer 3 switch made for high-capacity 10G SFP+ and 25G SFP28 connections.

Jun 15, 2026

Relation between switching capacity & number of ports of a switch.

Hi Folks, What is switching capacity of a switch ? Will this decide number of ports of a switch ? Kindly provide you answers or else

Apr 29, 2026

What is Switch Aggregation, Its Role and Selection Advice

This article wraps up "what is switch aggregation" and suggestions for choosing an aggregation switch. By

Aug 02, 2025

In-depth analysis: What is an aggregation switch?

In many network constructions, we have all heard of switches. So do you really understand

May 05, 2026

What is an Aggregate Switch?

What is an Aggregate Switch? Understanding Centralized Network Management An aggregate switch is a high

Contact Us

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