

HPE Networking Comware Switch Series 5550 HI

HPE Networking Comware Switch 32p 10M/100M/1G 4p SFP+ 1G/10G 4p SFP28 10G/25G 1-slot 5550HI (S5T56A)



What's new

- Improved hardware specification and scale: faster CPU, increased memory, up to 744 Gbps bandwidth, 128K MAC table, improved ARP, ACL, IPv4/v6 unicast and multicast and MPLS LSP scale.
- Diverse I/O options and upgraded uplinks: Flexible I/O 36 and 48 port copper, fiber and combo GE ports downlink, and expanded uplink ports 8x25G and 2x100G via the expansion model.
- Enhanced security with all ports MacSec AES-256.
- L3 multicast support.
- High Density PoE++: up to 48 port 90W PoE++/port.
- Support containerization for application hosting.

Overview

The HPE Networking Comware Switch Series 5550 HI is a family of stackable L3 access and aggregation switches powered by Comware delivering the performance, resiliency and flexibility for medium and large enterprise.

Equipped with 36 and 48 MACsec-256 enabled 1G copper, fiber and combo ports, 4 built in 10/25G SFP28 uplinks, dual hot swappable power supply and fan trays, the 5550 HI also has one built-in expansion slots for the cross platform network modules used in the Comware 5000 series. The platform supports high density 90W PoE (802.3bt) per port, high performance IP routing and MPLS. Intelligent Resilient Fabric (IRF) stacking up to 9 members adds scale and high availability while Intelligent Network Quality Analyzer (iNQA) supports real-time visibility into network health and performance.

In addition HPE IMC for centralized management, the 5550 HI comes with the built-in embedded management system SmartMC for configuration, visibility and monitoring at no additional cost.

Features

Scalable, High-Performance L3 Access Switches

The HPE Networking Comware Switch Series 5550 HI provides medium and large enterprise networks with faster CPU, increased memory, flash and packet buffer, up to 744 Gbps bandwidth, 128K MAC table, improved ARP, ACL, IPv4/v6 unicast and multicast scale, and MPLS LSP scale.

Improved non-blocking bandwidth and throughput: 744 Gbps of switching capacity and 553 Mpps of forwarding for powerful performance. Scales up to 9 members with Intelligent Resilient Fabric (IRF) stacking.

Expanded the uplink speed to 2x100G via expansion modules.

Improved MPLS LSP scale, comprehensive MPLS support (L3 MPLS VPN, VPLS, EoMPLS, MPLSoGRE) for use as MPLS CE, VXLAN and EVPN.

Support containerization for application hosting.

Resilient and Highly Available Access Networking

The HPE Networking Comware Switch Series 5550 HI uses Intelligent Resilient Framework (IRF) that supports virtualization of up to 9 physical switches into one logical device for simpler, flatter, and more agile networks.

Delivers outstanding resiliency, security, and multiservice support capabilities for traditional large enterprise networks. It supports advanced technologies such as OAM, RRPP, BFD, Multi-level QoS, MPLS, and VPLS.

Dual, redundant, hot-swappable power supplies maintain a dynamic network that delivers up to 2870 watts of industry standard 802.3bt PoE for powered cameras, phones, and wireless access points.

Supports Virtual Routing Redundancy Protocol (VRRP) and mLAG for link redundancy.

Virtual Extensible LAN (VXLAN) and Ethernet VPN (EVPN) allow greater flexibility to integrate into existing networks, better scalability without redesigning the underlay network, enhanced security to restrict attacks, and improved performance specially in spine-leaf architectures.

Security with Comprehensive Control

The HPE Networking Comware Switch Series 5550 HI supports flexible authentication methods like 802.1X, MAC Authentication and Encryption for greater device security and policy-driven application authentication. Per-user Access Control Lists (ACLs) provide identity-driven security and access control.

Dynamic ARP protection with functions such as ARP Detection and ARP packet validation blocks broadcast from unauthorized hosts and prevents eavesdropping or theft of network data.

Supports industry-standard MACsec 256 encryption for end-to-end data link layer security, providing increased MAC port binding and link group capacity.

Centralized security policy management and network protection with Intelligent Management Center (IMC) which leverages End User Admission Domination (EAD) integrated security policies, network access control and access right control policies to provide a comprehensive integrated security system.

Security with encryption of all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3, and other features including DHCP protection, IP source guard, dynamic ARP protection, and RADIUS/HWTACAS.

Simplified Management and Operations

The HPE Networking Comware Switch Series 5550 HI can be seamlessly managed with IMC to provide end-to-end network transparency with a consistent network experience through comprehensive configuration, compliance, and policy management.

It supports SmartMC, an embedded network management tool with a web-based GUI to simplify operations and facilitate centralized management. It offers features such as configuration backup, software version management and seamless switch replacement.

RMON and sFlow™ provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events.

Technical specifications	HPE Networking Comware Switch 32p 10M/100M/1G 4p SFP+ 1G/10G 4p SFP28 10G/25G 1-slot 5550HI
Product Number	S5T56A
Differentiator	32x 10/100/1000Base-T ports 4x 1G/10GBase-X SFP+ ports 4x 10G/25GBase-X SFP28 ports
Memory and processor	CPU: ARM 2GHz Quad core 4GB SDRAM, 4GB Flash, 8M Packet buffer
Latency	GE: < 5 μs, 10GE: < 3 μs, 40GE: <1.2μs
Throughput	554 Mpps
Switching capacity	744 Gbps
Routing capabilities	MAC table: 128K IPv4/IPv6 routes: 266K/133K ARP table: 80K ACL (Ingress/Egress): 4864/512
Stacking capabilities	9 member IRF
Management features	IMC - Intelligent Management Center Command-line interface SNMP manager SmartMC Web GUI
Input voltage	AC: 90V to 290V DC: -36V to -72V
Power consumption	Idle: Single AC: 32W, Dual AC: 39W; Single DC: 34W, Dual DC: 39W Full Load: Single AC: 90W, Dual AC: 96W; Single DC: 90W, Dual DC: 95W

HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

Advisory & Professional services

Experts can help you map out your path to hybrid cloud and optimize your operations.

Managed services

HPE runs your IT operations, giving you unified control, so can focus on innovation.

Support services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- **HPE Complete Care Service:** a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- **HPE Tech Care Service:** the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.
- **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

HPE GreenLake

[HPE GreenLake edge-to-cloud platform](#) is HPE's market-leading as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model, on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

[For additional technical information,
available models and options, please
reference the QuickSpecs](#)

Visit [HPE.com](#)

[Chat now](#)

© Copyright 2025 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

sFlow is a registered trademark of InMon Corp.

Image may differ from the actual product.

[PSN1014894310WWEN](#), September 18, 2025.

HEWLETT PACKARD ENTERPRISE

[hpe.com](#)

