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HPE Networking CW 2150 Switch Series QuickSpecs

The HPE Networking CW 2150 Switch Series is a family of stackable L3 access switches purposely built for enterprise branch offices and SMB networks.

Fully managed, stackable, supporting up to 176Gbps of switching capacity and 770W of PoE power, the CW 2150 family delivers enterprise-grade performance at the SMB price point. With 8, 16, 24, and 48 gigabit access ports and 802.3at compliant PoE ports, this flexible series is ready to connect your wireless access points, security cameras, and IoT devices. Four built-in 10G SFP+ uplinks and nine (9) switch Intelligent Resilient Fabric (IRF) stacking add scale, resiliency, and simplicity for your access network. The switch family supports dynamic routing protocols including PBR (Policy based routing), RIP (Routing Information Protocol), and OSPF (Open Shortest Path First).

Overview

Network visibility, management, and operation tools for this series include Web GUI, standard CLI and the switch embedded CW Dashboard at no additional cost. Other management options include HPE Intelligent Management Center (IMC), SNMP manager, Aruba Airwave, and REST API for seamless integration into third party dashboards.

HPE Networking CW 2150 Switch Series

Overview

Key features

- Enterprise-grade access switches with 8, 16, 24 and 48 built-in 1 GbE access ports and four 1/10G SFP+ uplinks
- Deliver up to 176 Gbps in nonblocking bandwidth and 131 Mpps in forwarding
- Up to 9-member Intelligent Resilient Fabric (IRF) stacking for reliable connectivity and simplified management
- Class 4 PoE (802.3at) provides 30W per port and up to 770W per system
- Fast PoE and Perpetual PoE for continued power delivery during equipment power cycle
- 24-port model adds 4 fiber copper combo ports for flexible connectivity options
- 8-port model has two 1G SFP and two 1G/10G SFP+ uplinks
- Fanless design in the 8-port and 24-/48- port non-PoE models
- Comprehensive security support including multi-layer access protection with granular ACLs, secure boot, encrypted access, and threat prevention features
- Advanced Quality of Service (QoS), IPv6, and dynamic L3 protocols (RIP and OSPF) for reliable connectivity
- Simplified management with Web GUI, CLI and embedded CW Dashboard included free of charge
- Additional management choices include HPE Intelligent Management Center (IMC), Airwave, SNMP, and REST APIs
- Built-in 6 kV surge protection reduces the risk of power strikes in demanding environments such as construction sites

Standard Features

Enterprise-class Access Connectivity

The HPE Networking CW 2150 Switch Series delivers up to 176 Gbps of non-blocking bandwidth and up to 131 Mpps in forwarding. It supports nine (9) switch Intelligent Resilient Fabric (IRF) stacking for resilient and availability.

The 1U switch family supports 8 models, with four (4) 1G/10G SFP+ uplinks in the 16, 24 and 48 port models, and additional two (2) 1G SFP and two (2) 1G/10G SFP+ uplinks in the 8 port models. The 24-port model adds four SFP combo ports for flexible connectivity options.

Fanless design on the 8-, 24-, and 48- port non-PoE models for noise sensitive environments.

Built-in 6 kV surge protection reduces the risk of power strikes in demanding settings such as construction sites.

Powerful PoE Capabilities

The CW 2150 switch series deliver 125W, 248W, 405W, 390W, and 770W Class 4 PoE across the 8, 16, 24, and 48-portmodels. It supports advanced PoE features including fast PoE to deliver power within seconds of system startup, perpetual PoE to maintain power during a power-source reboot, and PoE watchdog function to automatically remove power when the connected device is no longer active.

Comprehensive Security Control

The switch family provides comprehensive security features to protect your business data and keep unauthorized access for modern SMB environments:

- Secure boot verifies digital signatures to prevent unauthorized or malicious software from loading at startup
- Multi-layer access protection with granular ACLs (IPv4/IPv6, VLAN, port-based), identity-driven policies, and authentication options including 802.1X, MAC, Web, RADIUS, TACACS+
- Encrypted access using SSHv2, SSL, SNMPv3, and TLS, along with role-based privileges and audit logging
- Threat-prevention features include Control Plane Policing (DoS protection), ARP and DHCP protection, ICMP throttling, port security, and source-port filtering.

Advanced Layer 2 and Layer 3 Traffic Management

The CW 2150 series support advanced Layer 2 and Layer 3 features for SMB, enterprise branch offices, as well as service provider managed services. Highlights including:

- Dynamic routing protocols including PBR, RIP and OSPF
- Multi-VRF Customer Edge (MCE or VRF-Lite) to support multiple virtual routing and forwarding (VRF) tables, separating traffic for different customers or internal departments over a single physical link to a provider edge (PE) router
- IPv4 and IPv6 dual stack
- Rapid Ring Protection Protocol (RRPP) for rapid ring topology convergence
- Provider Backbone Bridges (PBB) allowing service provider to separate customer MAC addresses from the provider’s backbone (MAC-in-MAC)
- Ethernet OAM (IEEE 802.3ah) for monitoring the status of the link between two devices
- Dying Gasp notifies network management systems of an impending and unexpected power loss

Standard Features

Performance

Nonblocking architecture

Up to 176 Gbps of nonblocking wire speed switching with up to 130.9 Mpps throughput

Hardware-based wire speed access control lists (ACLs)

Help provide high levels of security and ease of administration without impacting network performance with a feature-rich TCAM-based ACL implementation

Resiliency and High Availability

Separate Data and Control Paths

Separate control from services and keeps service processing isolated; increases security and performance

Intelligent Resilient Fabric (IRF)

Creates virtual resilient switching fabrics where up to nine (9) switches perform as a single logical device; switches do not have to be co-located and can be part of a disaster-recovery system; servers or switches can be attached using standard LACP for automatic load balancing and high availability; can eliminate the need for complex protocols like Spanning Tree Protocol or VRRP, thereby simplifying network operation.

Smart Link

Provides easy-to-configure link redundancy of active and standby links allowing 100ms failover between links, supports 48 groups and 64 instances

Quality of Service

Broadcast control

Allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic

Advanced classifier-based QoS

Classifies traffic using multiple match criteria based on Layer 2, 3, and 4 information; apply QoS policies such as setting priority level and rate limit to selected traffic on a port, VLAN, or whole switch

Powerful Queuing and Scheduling

Supports the following congestion actions: strict priority (SP) queuing, weighted round robin (WRR), and SP+WRR hybrid scheduling for latency-sensitive traffic

Traffic policing

Supports Committed Access Rate (CAR) and line rate

ACL Logging

Enables detailed monitoring of packet flows that match QoS-related ACL entries, improving traffic visibility and assisting in troubleshooting and policy validation

Standard Features

Buffer Configuration
Supports flexible queue buffer allocation to accommodate bursty traffic patterns, enhance congestion management and improve overall forwarding performance

Connectivity

Auto-MDIX
Automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports

Flow Control
Provides back pressure using standard IEEE 802.3x, reducing congestion in heavy traffic situations

High-density Connectivity
Provides up to 48 fixed 10/100/1000BASE-T ports in a Layer 2/Layer 3 switch

IEEE 802.3at Power over Ethernet (PoE+)
Simplifies deployment and dramatically reduces installation costs by helping to eliminate the time and cost involved in supplying local power at each access point location

Ethernet Operations, Administration and Maintenance (OAM)
Detects data link layer problems that occurred in the "last mile" using the IEEE 802.3ah OAM standard; monitors the status of the link between two devices

Provider Backbone Bridges (PBB)
IEEE 802.1ah-2008, or Provider Backbone Bridges (PBB), is a networking standard that enhances network scalability by encapsulating customer Ethernet frames (MAC-in-MAC) inside a provider-specific header; it allows service providers to scale up services, separating customer MAC addresses from the provider backbone.

3rd Party Transceiver support
Allows to enable non-HPE 1G and 10G transceivers and cables. Note that there is no warranty nor support for the transceiver/cable when this feature is used

Layer 2 Switching

16K MAC Address Table
Provides access to many Layer 2 devices

10GbE Port Aggregation
Allows grouping of ports to increase overall data throughput to a remote device

VLAN Support and Tagging
Supports IEEE 802.1Q with 4,094 VLAN IDs and 512 VLANs simultaneously

Standard Features

Jumbo Frame Support
Improves the performance of large data transfers; supports frame size of up to 9 KB

IEEE 802.1ad QinQ and Selective QinQ
Increase the scalability of an Ethernet network by providing a hierarchical structure; connect multiple LANs on a high-speed campus or metro network

STP, MSTP, RSTP, PVST+, RPVST+, MVRP
Supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), Per-VLAN Spanning Tree (PVST+), Rapid Per-VLAN Spanning Tree (RPVST+) for improved bandwidth and faster convergence. MVRP allows automatic learning and dynamic assignment of VLANs

Rapid Ring Protection Protocol (RRPP)
Ethernet ring-specific protocol designed to prevent broadcast storms and provide rapid topology convergence, typically under 50ms, supports 8 instances and 16 rings.

Bridge Protocol Data Unit (BPDU) Tunneling
Transmits STP BPDUs transparently, allowing correct tree calculations across service providers, WANs, or MANs

Port Mirroring and RSPAN
Duplicates port traffic (ingress and egress) to a monitoring port; supports 4 mirroring groups; RSPAN mirrors traffic from source ports or VLANs across multiple, physically distributed switches to a centralized destination device remotely

Internet Group Management Protocol (IGMP)
Controls and manages the flooding of multicast packets in a Layer 2 network

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Layer 3 Services

Address Resolution Protocol (ARP)
Determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network

Domain Name System (DNS)
Provides a distributed database that translates domain names and IP addresses, which simplifies network design; supports client and server

Dynamic Host Configuration Protocol (DHCP)
Simplifies the management of large IP networks; supports DHCP Server, DHCP Client, DHCP Relay, DHCP Rogue Server Check

Standard Features

Virtual Router Redundancy Protocol (VRRP) and VRRPe
An open-standard IETF protocol that provides network redundancy by allowing multiple routers to act as a single virtual default gateway

Loopback Interface Address
Defines an address that can always be reachable, improving diagnostic capability

User Datagram Protocol (UDP) Helper Function
Allows UDP broadcasts to be directed across router interfaces to specific IP unicast or subnet broadcast addresses and prevents server spoofing for UDP services such as DHCP

Layer 3 Routing

IPv4 and IPv6 Static IP Routing
Provides manually configured routing for both IPv4 and IPv6 networks

IPv4 and IPv6 Policy Based Routing
Route packets based on custom policies (source IP, application, port) rather than just the destination IP address; it enables granular control for steering specific traffic, such as directing sensitive data over secure links or managing Quality of Service (QoS)

Open Shortest Path First (OSPF)
An Interior Gateway Protocol (IGP) that uses a link state routing algorithm; supports OSPFv1/v2 and OSPFv3

Routing Information Protocol (RIP)
Uses a distance vector algorithm with UDP packets for route determination; supports RIPv1 and RIPv2 and RIPng routing; includes loop protection

Multi-VRF Customer Edge (MCE or VRF-Lite) to support multiple virtual routing and forwarding (VRF) tables, separating traffic for different customers or internal departments over a single physical link to a provider edge (PE) router and significantly reducing hardware costs. Supports up to 32 VPN instances.

Multicast

Internet Group Management Protocol (IGMP)
Utilizes Any-Source Multicast (ASM) to manage IPv4 multicast networks; supports IGMPv1, v2, and v3

IGMP Snooping and PIM snooping
Allow multiple VLANs to receive the same IPv4 multicast traffic and prevent unnecessary flooding between host and switch as well as between the switches

Multicast Listener Discovery (MLD)
Enables discovery of IPv6 multicast listeners; support MLD v1 and v2

Standard Features

Multicast VLAN Registration (MVR), MVR+, MVRP

Used to efficiently manage and distribute multicast traffic—typically IPTV or video services—across a network without needing complex Layer 3 routing. MVR+ allows for advanced or enhanced implementations of MVR, which provides improved control over how multicast traffic is delivered, filtered, and managed

IPv6

IPv6 Host

Enables switches to be managed in an IPv6 network

Dual Stack (IPv4 and IPv6)

Transitions from IPv4 to IPv6, supporting connectivity for both protocols

MLD Snooping

Forwards IPv6 multicast traffic to the appropriate interface

IPv6 ACL/QoS

supports ACL and QoS for IPv6 network traffic

IPv6 static routing, Policy Based Routing and Dynamic Routing

Supports static, IPv6 PBR, RIPng and OSPFv3

Management

Secure Web GUI

Provides a secure, easy-to-use graphical interface for configuring the module via HTTPS

Industry-standard CLI

With a hierarchical structure for reduced training time and expense. Delivers increased productivity in multivendor environments

Remote Configuration and Management

Enables configuration and management through a secure Web browser or a CLI located on a remote device

CW Dashboard

Embedded network management tool with a web-based GUI to simplify operations and facilitate centralized management. It is made available at no additional cost and offers centralized configuration backup, software version management and seamless switch replacement.

HPE Intelligent Management Center (IMC)

Integrates fault management, element configuration, and network monitoring from a central vantage point; built-in support for third-party devices enables network administrators to centrally manage all network elements with a variety of automated tasks, including discovery, categorization, baseline configurations, and software images; the software also provides configuration comparison tools, version tracking, change alerts, and more

Standard Features

Network Management
SNMP v1/v2c/v3, MIB-II with Traps, and RADIUS Authentication Client MIB (RFC 2618); embedded HTML management tool with secure access

REST API interface
Programmable interface for seamless integration into 3rd party dashboards

sFlow (RFC 3176)
Provides scalable ASIC-based wirespeed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes

TFTP and SFTP
support offers different mechanisms for configuration updates; trivial FTP (TFTP) allows bidirectional transfers over a TCP/IP network; Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security

Manager and Operator Privilege Levels
Provides read-only (operator) and read/write (manager) access on CLI and Web browser management interfaces

Command Authorization
Leverages HWTACACS to link a custom list of CLI commands to an individual network administrator's login; also provides an audit trail

Multiple Configuration Files
Stores easily to the flash image

Session Logging
Provides detailed information for problem identification and resolution

Remote Monitoring (RMON)
Uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group; supports RMON1 and RMON2

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications

Management VLAN
Segments traffic to and from management interfaces, including CLI/telnet, a Web browser interface, and SNMP

Remote Intelligent Mirroring
Mirrors ingress ACL-selected traffic from a switch port or VLAN to a local or remote switch port anywhere on the network

Standard Features

Device Link Detection Protocol (DLDP)
Monitors a cable between two compatible switches and shuts down the ports on both ends if the cable is broken, which prevents network problems such as loops

IPv6 Management
Provides future-proof networking because the switch is capable of being managed whether the attached network is running IPv4 or IPv6; supports pingv6, tracertv6, Telnetv6, TFTPv6, DNSv6, syslogv6, FTPv6, SNMPv6, DHCPv6, and RADIUS for IPv6

Troubleshooting
Ingress and egress port monitoring enables network problem-solving; Virtual Cable Tests (VTC) provide visibility into cable problems

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Security

Secure Boot
Verifies digital signatures to help prevent unauthorized or malicious software from loading at startup

Access Control Lists (ACLs)
Provides IP Layer 2 to Layer 4 traffic filtering; supports global ACL, VLAN ACL, port ACL, and IPv6 ACL

IEEE 802.1X
Industry-standard method of user authentication using an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server

Remote Authentication Dial-In User Service (RADIUS)/HWTACACS
Eases switch management security administration by using a password authentication server

MAC-based Authentication
Client is authenticated with the RADIUS server based on the client's MAC address

Identity-driven Security and Access Control
- **Per-user ACLs**
  Permits or denies user access to specific network resources based on user identity and time of day, allowing multiple types of users on the same network to access specific network services without risking network security or providing unauthorized access to sensitive data
- **Automatic VLAN assignment**
  Automatically assigns users to the appropriate VLAN based on their identities

Secure Management Access
Delivers secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2, SSL, HTTPS, TLS, and/or SNMPv3

Secure FTP/ SCP
Allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file

Standard Features

Guest VLAN
Provides a browser-based environment to authenticated clients similar to IEEE 802.1X

Private VLAN (PVLAN)
Improves network security by allowing virtual organization of devices regardless of their physical location and enhances performance by reducing traffic congestion

Port Security
Allows access only to specified MAC addresses, which can be learned or specified by the administrator

Port Isolation
Secures and adds privacy, and prevents malicious attackers from obtaining user information

STP BPDU Port Protection
Blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks

STP Root Guard
Protects the root bridge from malicious attacks or configuration mistakes

Dynamic ARP Protection and Rate Limiting
Blocks ARP broadcasts from unauthorized hosts and preventing eavesdropping or theft of network data

DHCP Snooping and DHCP Relay Option 82
Prevent malicious denial-of-service attacks by acting as a firewall between untrusted hosts and trusted DHCP servers. Support DHCP snooping option 82, DHCP Relay option 82, DHCP snooping trust, DHCP snooping item backup

IP Source Guard
Prevent IP spoofing attacks

Device support

Prestandard PoE Support
Detects and provides power to prestandard PoE devices such as wireless LAN access points and IP phones

Convergence

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
Facilitates easy mapping using network management applications with LLDP automated device discovery protocol

LLDP-MED
Is a standard extension that automatically configures network devices, including LLDP-capable IP phones

LLDP-CDP compatibility
Receives and recognizes CDP packets from Cisco's IP phones for seamless interoperation

Standard Features

Bidirectional Forwarding Detection (BFD)
Allows rapid failure detection (often in milliseconds) between adjacent network devices

IEEE 802.3at Power over Ethernet (PoE+)
Provides up to 30 W per port for devices such as IP phones, wireless access points, and security cameras, as well as IEEE 802.3af-compliant IoT end device; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary

Auto PoE Power Configuration and Allocations
Assigns the required power to a port for a PD device based on Link Layer Discovery Protocol (LLDP); supports multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user-specified) to allocate PoE power

Voice VLAN
Automatically assigns VLAN and priority for IP phones, simplifying network configuration and maintenance

IP Multicast Snooping (data-driven IGMP)
Prevents flooding of IP multicast traffic

Additional Information

Energy Efficient Ethernet (EEE)
Reduces power consumption in accordance with IEEE 802.3az

Green initiative support
Provides support for RoHS and WEEE regulations

Built-in 6 kV surge protection technology
Reduce the risk of power strikes in demanding environments such as construction sites

Warranty and Support

Limited Lifetime Warranty
See the HPE Aruba Networking Product Warranty Quick Reference Guide for warranty information included with your product purchase.

Software Releases
To find software for your product, refer to http://www.hpe.com/networking/support; for details on the software releases available with your product purchase, refer to https://www.hpe.com/us/en/networking/hpe-aruba-networking-support-services.html

Configuration Information

BTO Models

Switch Chassis

Description	SKU
HPE Networking CW 2150 48p 10M/100M/1G 4p SFP+ 1G/10G Switch	S6X52A
HPE Networking CW 2150 48p 10M/100M/1G PoE+ 4p SFP+ 1G/10G 390W Switch	S6X53A
HPE Networking CW 2150 48p 10M/100M/1G PoE+ 4p SFP+ 1G/10G 770W Switch	S6X54A
HPE Networking CW 2150 24p 10M/100M/1G 4p SFP+ 1G/10G Switch	S6X50A
HPE Networking CW 2150 24p 10M/100M/1G PoE+ 4p SFP 1G Combo 4p SFP+ 1G/10G 405W Switch	S6X51A
HPE Networking CW 2150 16p 10M/100M/1G PoE+ 4p SFP+ 1G/10G 248W Switch	S6X55A
HPE Networking CW 2150 8p 10M/100M/1G 2p SFP 1G 2p SFP+ 1G/10G Switch	S6X56A
HPE Networking CW 2150 8p 10M/100M/1G PoE+ 2p SFP 1G 2p SFP+ 1G/10G 125W Switch	S6X57A

Transceivers

SFP Transceivers

Description	SKU
HPE Networking X120 1G SFP LC SX Transceiver	JD118B
HPE Networking X120 1G SFP LC LX Transceiver	JD119B
HPE Networking X120 1G SFP RJ45 T Transceiver	JD089B
HPE Networking X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE Networking X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE Networking X120 1G SFP LC LH100 Transceiver	JD103A

SFP+ Transceivers

Description	SKU
HPE Networking X130 10G SFP+ LC BiDi 40km-Downlink Transceiver	JL740A
HPE Networking X130 10G SFP+ LC ER 40km Transceiver	JG234A
HPE Networking X130 10G SFP+ LC BiDi 40km-Uplink Transceiver	JL739A
HPE Networking X130 10G SFP+ LC LH 80km Transceiver	JG915A
HPE Networking X130 10G SFP+ LC SR Transceiver	JD092B
HPE Networking X130 10G SFP+ LC LR Transceiver	JD094B
HPE Networking X130 10G SFP+ LC BiDi 10km-Uplink Transceiver	JL737A
HPE Networking X130 10G SFP+ LC BiDi 10km-Downlink Transceiver	JL738A
HPE Networking X240 10G SFP+ SFP+ 3m DAC Cable	JD097C
HPE Networking X240 10G SFP+ SFP+ 5m DAC Cable	JG081C
HPE Networking X240 10G SFP+ SFP+ 0.65m DAC Cable	JD095C
HPE Networking X240 10G SFP+ SFP+ 1.2m DAC Cable	JD096C
HPE Networking X2A0 10G SFP+ to SFP+ 7m Active Optical Cable	JL290A
HPE Networking X2A0 10G SFP+ to SFP+ 10m Active Optical Cable	JL291A
HPE Networking X2A0 10G SFP+ to SFP+ 20m Active Optical Cable	JL292A

Configuration Information

Cables

Description	
HPE Networking X240 10G SFP+ SFP+ 3m DAC Cable	JD097C
HPE Networking X240 10G SFP+ SFP+ 5m DAC Cable	JG081C
HPE Networking X240 10G SFP+ SFP+ 0.65m DAC Cable	JD095C
HPE Networking X240 10G SFP+ SFP+ 1.2m DAC Cable	JD096C
HPE Networking X2A0 10G SFP+ to SFP+ 7m Active Optical Cable	JL290A
HPE Networking X2A0 10G SFP+ to SFP+ 10m Active Optical Cable	JL291A
HPE Networking X2A0 10G SFP+ to SFP+ 20m Active Optical Cable	JL292A

Technical Specifications

HPE Networking CW 2150 Switch Series			
Specifications	**S6X52A**	**S6X53A**	**S6X54A**
Description	HPE NW CW 2150 48G 4P Sw	HPE NW CW 2150 48G PoE+ 4P 390W Sw	HPE NW CW 2150 48G PoE+ 4P 770W Sw
Fixed Ports	48x10/100/1000BASE-T 4*1G/10GBASE-X SFP+	48x10/100/1000BASE-T PoE+ 4x1G/10GBASE-X SFP+	48x10/100/1000BASE-T PoE+ 4x1G/10GBASE-X SFP+
Additional Ports	1xRJ45 Console 1xOOBM 1xUSB Type C	1xRJ45 Console 1xOOBM 1xUSB Type C	1xRJ45 Console 1xOOBM 1xUSB Type C
Power supplies	Fixed	Fixed	Fixed
Fans	Fanless	2	2
Physical Characteristics			
Dimensions	440mm×260mm×44mm	440mm×260mm×44mm	440mm×260mm×44mm
Weight	≤ 3.6kg	≤ 4.1kg	≤ 4.2kg
CPU	ARM 1.2GHz @ Dual Core	ARM 1.2GHz @ Dual Core	ARM 1.2GHz @ Dual Core
Memory and Flash	1GB SDRAM 512MB Flash	1GB SDRAM 512MB Flash	1GB SDRAM 512MB Flash
Packet Buffer	1.5MB	1.5MB	1.5MB
Performance			
Forwarding Capacity	176Gbps	176Gbps	176Gbps
Throughput	131Mpps	131Mpps	131Mpps
Average Latency	GE: <5us 10GE:<3us	GE: <5us 10GE:<3us	GE: <5us 10GE:<3us
Stacking Members	9	9	9
Switched virtual interface	32	32	32
Mac address table	16K	16K	16K
IPv4 Routes	1500	1500	1500
IPv4 host table (ARP)	1024	1024	1024
IPv6 Routes	512	512	512
IPv6 Host Table (ND)	512	512	512
IGMP groups	500	500	500
MLD groups	500	500	500
ACL (Ingress/Egress)	1024	1024	1024
VRF	32	32	32
CW Dashboard			
Device Role	Topology Master (TM) and Topology Client (TC)	Topology Master (TM) and Topology Client (TC)	Topology Master (TM) and Topology Client (TC)
Environment			
Operating Temperature	23°F to 122°F (–5°C to 50°C)	23°F to 122°F (–5°C to 50°C)	23°F to 122°F (–5°C to 50°C)
Operating Relative Humidity	5% to 95%, noncondensing	5% to 95%, noncondensing	5% to 95%, noncondensing
Non-operating Temperature	–40°F to 158°F (–40°C to 70°C)	–40°F to 158°F (–40°C to 70°C)	–40°F to 158°F (–40°C to 70°C)
Non-operating storage humidity	5% to 95%, noncondensing	5% to 95%, noncondensing	5% to 95%, noncondensing

Technical Specifications

Acoustic (ISO7779)	-	37.6/45.5dB	32.9/60.0dB
Electric Characteristics			
Power Rating	AC: 90V to 264V	AC: 90 to 290V	AC: 90 to 290V
Power Consumption	Idle: 13W Typical: 31W Full Load: 42W	Idle: 29W Typical: 54W Full Load: 512W (POE 390W)	Idle: 35W Typical: 56W Full Load: 969W (POE 770W)
PoE Power	Non-PoE	390W	770W
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; IEC 62368-1; CAN/CSA-C22.2 No. 60950-1; EN 62368-1/A11; FDA 21 CFR Subchapter J; RoHS Compliance		
Emissions	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-3/2012.04; EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A		
Immunity	EN 55024 EN 300 386		
Mounting and Enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)		
Management	Web GUI, Command-line interface (CLI), CW Dashboard, IMC - Intelligent Management Center (IMC), Airwave, SNMP manager and Rest API;		
Warranty	Limited lifetime warranty. See the warranty duration guide		
Services	See the HPE website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, contact your local HPE sales office.		

Technical Specifications

HPE Networking CW 2150 Switch Series			
Specifications	**S6X50A**	**S6X51A**	**S6X55A**
Description	HPE NW CW 2150 24G 4P Sw	HPE NW CW 2150 24G PoE+ 4F 4P 405W Sw	HPE NW CW 2150 16G PoE+ 4P 248W Sw
Fixed Prts	24x10/100/1000BASE-T 4x 1G/10GBASE-X SFP+	24x10/100/1000BASE-T PoE+ 4x100/1000BASE-X SFP Combo 4x1G/10GBASE-X SFP+	16x10/100/1000BASE-T PoE+ 4x1G/10GBASE-X SFP+
Additional Ports	1xRJ45 Console 1xOOBM 1xUSB Type C	1xRJ45 Console 1xOOBM 1xUSB Type C	1xRJ45 Console 1xOOBM 1xUSB Type C
Power supplies	Fixed	Fixed	Fixed
Fans	Fanless	2	1
Physical Characteristics			
Dimensions	440mm×160mm×44mm	440mm×260mm×44mm	440mm×260mm×44mm
Weight	≤2.0kg	≤3.6kg	≤3.6kg
CPU	ARM 1.2 GHz @ Dual Core	ARM 1.2 GHz @ Dual Core	ARM 1.2 GHz @ Dual Core
Memory and Flash	1GB SDRAM 512MB Flash	1GB SDRAM 512MB Flash	1GB SDRAM 512MB Flash
Packet Buffer	1.5MB	1.5MB	1.5MB
Performance			
Forwarding Capacity	128Gbps	128Gbps	112Gbps
Throughput	95.2Mpps	95.2Mpps	83.3Mpps
Average Latency	GE: <5us 10GE:<3us	GE: <5us 10GE:<3us	GE: <5us 10GE:<3us
Stacking Members	9	9	9
Switched virtual interface	32	32	32
Mac Address Table	16K	16K	16K
IPv4 Routes	1500	1500	1500
IPv4 host table (ARP)	1024	1024	1024
IPv6 Routes	512	512	512
IPv6 Host Table (ND)	512	512	512
IGMP groups	500	500	500
MLD groups	500	500	500
ACL (Ingress/Egress)	1024	1024	1024
VRF	32	32	32

Technical Specifications

CW Dashboard			
Device Role	Topology Master (TM) and Topology Client (TC)	Topology Master (TM) and Topology Client (TC)	Topology Master (TM) and Topology Client (TC)
Environment			
Operating Temperature	23°F to 122°F (–5°C to 50°C)	23°F to 122°F (–5°C to 50°C)	23°F to 122°F (–5°C to 50°C)
Operating Relative Humidity	5% to 95%, non-condensing	5% to 95%, non-condensing	5% to 95%, non-condensing
Non-operating Temperature	–40°F to 158°F (–40°C to 70°C)	–40°F to 158°F (–40°C to 70°C)	–40°F to 158°F (–40°C to 70°C)
Non-operating storage humidity	5% to 95%, non-condensing	5% to 95%, non-condensing	5% to 95%, non-condensing
Acoustic (ISO7779)	-	37.6/45.5dB	37.6/45.5dB
Electric Characteristics			
Power Rating	AC: 90V to 264V	AC: 90 to 290V	AC: 90 to 290V
Power Consumption	Idle: 6W Typical: 16W Full Load: 21W	Idle: 23W Typical: 35W Full Load: 465W (POE 405W)	Idle: 25W Typical: 38W Full Load: 317W (POE 248W)
PoE Power	Non-PoE	405W	248W
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; IEC 62368-1; CAN/CSA-C22.2 No. 60950-1; EN 62368-1/A11; FDA 21 CFR Subchapter J; RoHS Compliance		
Emissions	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-3/2012.04; EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A		
Immunity	EN 55024 EN 300 386		
Mounting and Enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)		
Management	Web GUI, Command-line interface (CLI), CW Dashboard, IMC - Intelligent Management Center (IMC), Airwave, SNMP manager and Rest AP		
Warranty	Limited lifetime warranty. See the warranty duration guide		
Services	See the HPE website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, contact your local HPE sales office.		

Technical Specifications

HPE Networking CW 2150 Switch Series		
Specifications	**S6X56A**	**S6X57A**
Description	HPE NW CW 2150 8G 2F 2P Sw	HPE NW CW 2150 8G PoE+ 2F 2P 125W Sw
Fixed Ports	8x10/100/1000BASE-T 2x1000BASE-X SFP 2x1G/10G BASE-X SFP+	8x10/100/1000BASE-T PoE+ 2x1000BASE-X SFP 2x1G/10G BASE-X SFP+
Additional Ports	1xRJ45 Console 1xOOBM 1xUSB Type C	1xRJ45 Console 1xOOBM 1xUSB Type C
Power supplies	Fixed	Fixed
Fans	Fanless	Fanless
Physical Characteristics		
Dimensions	266mm×161mm×44mm	266mm×161mm×44mm
Weight	≤1.1kg	≤1.5kg
CPU	ARM 1.2GHz @ Dual Core	ARM 1.2GHz @ Dual Core
Memory and Flash	1GB SDRAM 512MB Flash	1GB SDRAM 512MB Flash
Packet Buffer	1.5MB	1.5MB
Performance		
Forwarding Capacity	60Gbps	60Gbps
Throughput	44.6Mpps	44.6Mpps
Average Latency	GE: <5us 10GE:<3us	GE: <5us 10GE:<3us
Stacking Members	9	9
Switched virtual interface	32	32
Mac Address Table	16K	16K
IPv4 Routes	1500	1500
IPv4 host table (ARP)	1024	1024
IPv6 Routes	512	512
IPv6 Host Table (ND)	512	512
IGMP groups	500	500
MLD groups	500	500
ACL (Ingress/Egress)	1024	1024
VRF	32	32
CW Dashboard		
Device Role	Topology Master (TM) and Topology Client (TC)	Topology Master (TM) and Topology Client (TC)
Environment		
Operating Temperature	23°F to 122°F (–5°C to 50°C)	23°F to 122°F (–5°C to 50°C)
Operating Relative Humidity	5% to 95%, noncondensing	5% to 95%, noncondensing
Non-operating Temperature	–40°F to 158°F (–40°C to 70°C)	–40°F to 158°F (–40°C to 70°C)

Technical Specifications

Non-operating storage humidity	5% to 95%, noncondensing	5% to 95%, noncondensing
Acoustic (ISO7779)	-	-
Electric Characteristics		
Power Rating	AC: 90V to 264V	AC: 90 to 264V
Power Consumption	Idle: 5W Typical: 8W Full Load: 16W	Idle: 8W Typical: 10W Full Load: 152W (POE 125W)
PoE Power	Non-PoE	125W
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; IEC 62368-1; CAN/CSA-C22.2 No. 60950-1; EN 62368-1/A11; FDA 21 CFR Subchapter J; RoHS Compliance	
Emissions	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-3/2012.04; EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A	
Immunity	EN 55024 EN 300 386	
Mounting and Enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	
Management	Web GUI, Command-line interface (CLI), CW Dashboard, IMC - Intelligent Management Center (IMC), Airwave, SNMP manager and Rest AP	
Warranty	Limited lifetime warranty. See the warranty duration guide	
Services	See the HPE website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, contact your local HPE sales office.	

Summary of Changes

Date	Version History	Action	Description of Change:
15-Jun-2026	Version 3	Changed	New SFP+ Transceivers SKUs were added in Configuration Information section: JD097C, JG081C, JD095C, JD096C, JL290A, JL291A, JL292A.
18-May-2026	Version 2	Changed	CW Dashboard information was added in Overview, Standard Features, and Technical Specifications.
06-Apr-2026	Version 1	New	New QuickSpecs

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Products within this series are IPv6 Ready certified. See the Specifications section of this series for more information.

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