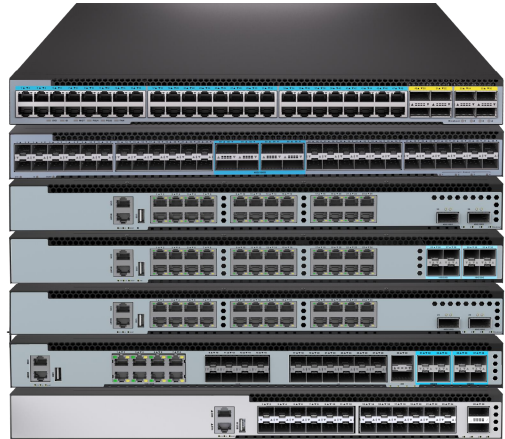


Product Overview

The HD5600 Series switches are designed with two generations of domestic Switch Chips, namely the widely favored [VastLakes Series Chip platform](#) and the high-performance [PeakNetX Series Chip platform](#). The HD5600 Series switches have various port options and offer rich L2/L3 features, making them the perfect choice as aggregation or access switches enterprise, government, specific industry networks.



Key features of the HD5600 Series Switches

- POE++ provide max 90W power of ports.
- MLAG which can build an Active-Active system to improve the reliability of the network links from single board grade to device grade.
- Implementing Vxlan and BGP protocols to build EVPN applications for data centers scenario.
- Switch-to-switch encryption using MACsec (Media Access Control Security) AES-CMAC.
- Precision Timing Protocol.
- Rich L2/L3 features like IPv6, OSPF, BGP, PIM, etc.

The HD5600 Series switches provide various power supply solutions for customers choosing, fixed single power supply, fixed redundant power supplies, and redundant hot-swappable power supplies (AC and DC are both available). The Fan solutions also have multiple bays with Field replaceable fan modules and build in fans. Generally, air flow of HD5600 Series is front to rear (AFO), and some of models can do customization of rear to front (AFI) airflow.

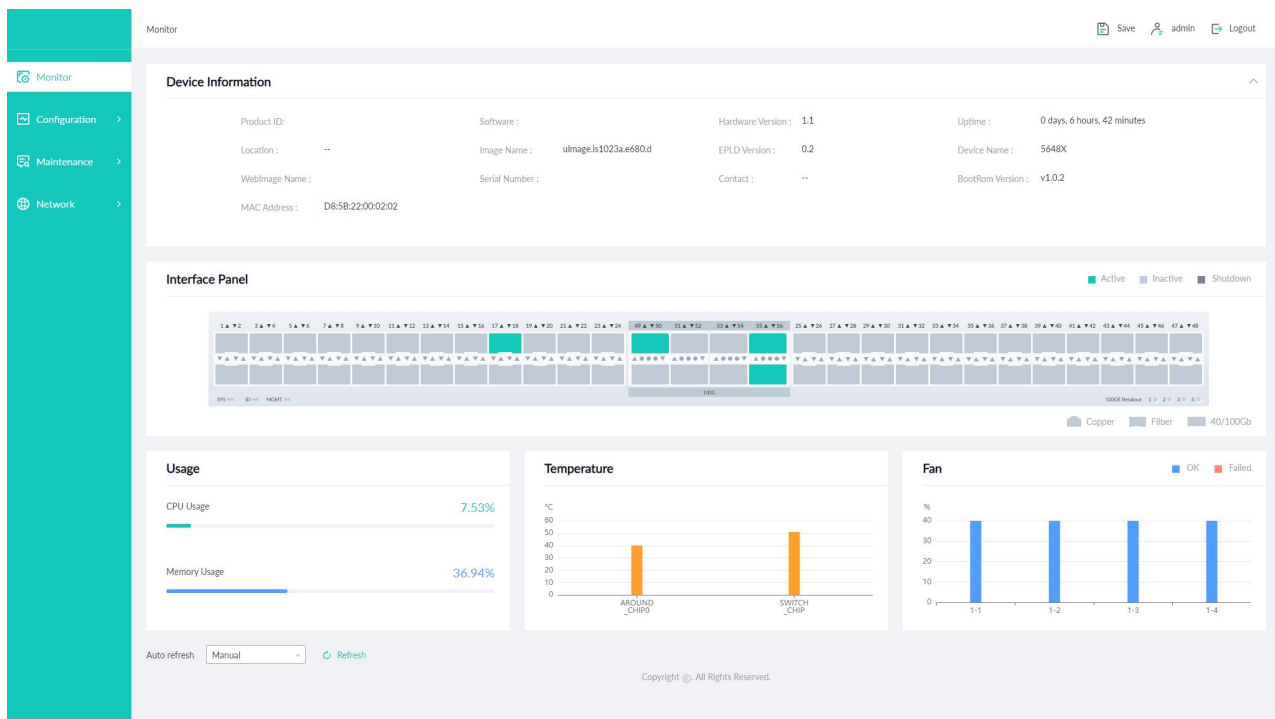
Table 1: Feasible PSU and airflow of HD5600 Series Switches

Items	AC	DC	PoE Ports	AFO	AFI	Power Input	FAN
HD5648T-8Z-EI	○	○	X	○	○	2	4
HD5648X-8Z-SI	○	X	X	○	X	1	4
HD5648X-8Z-DI	○	X	X	○	X	2	4
HD5624X-2Z-EI	○	○	X	○	○	2	2
HD5624X-2Z-SI	○	X	X	○	X	1	4
HD5624X-8N-EI	○	○	X	○	○	2	2
HD5624T-2Z-EI	○	○	X	○	○	2	2
HD5624T-2Z-SI	○	X	X	○	X	1	4
HD5624T-8N-EI	○	○	X	○	○	2	2
HD5624P-2Z-EI	○	○	24	○	X	2	2
HD5624P-8N-EI	○	○	24	○	X	2	2
HD5612X-16G8N2 Q-EI	○	○	X	○	○	2	2
HD5612X-16G8N2 Q-SI	○	X	X	○	X	1	4

The HD5600 Series switches support varied management ways, include console port / in-band network ports / out-of-band network port. Support SNMP v1/v2/v3, Support CLI (Command Line Interface), web management, Telnet and FTP connection. Support OAM to make management more convenient, and support SSH2.0, SSL, etc. to ensure security of management.

Visual WEB GUI

HOS allows you to quickly configure common configuration items using a visual WEB GUI, which lowers the application threshold for users.



The HD5600 family of Ethernet switches consists of the following models

Models	Ethernet Ports	Management	PSU 1/PSU 2	Cooling
HD5648T-8Z-EI	48 x100M/1G/2.5G/5G/10G Base-T + 8 x 100G QSFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	550W / 550W CRPS	4 x Fan Modules (front-to-back airflow)
HD5648X-8Z-SI	48 x 10G SFP+ + 8 x 100G QSFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	Fixed single power supply	4 x fixed fans (front-to-back airflow)
HD5648X-8Z-DI	48 x 10G SFP+ + 8 x 100G QSFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	Fixed dual power supplies	4 x fixed fans (front-to-back airflow)
HD5624X-2Z-EI	24 x 10G SFP+ + 2 x 100G QSFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	350W / 350W CRPS	2 x Fan Modules (front-to-back airflow)

Models	Ethernet Ports	Management	PSU 1/PSU 2	Cooling
HD5624X-2Z-SI	24 x 10G SFP+ + 2 x 100G QSFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	Fixed single power supply	4 x fixed fans (front-to-back airflow)
HD5624X-8N-EI	24 x 10G SFP+ + 8 x 25G SFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	350W / 350W CRPS	2 x Fan Modules (front-to-back airflow)
HD5624T-2Z-EI	24*100M/1G/2.5G/5G/10G Base-T+2*100G QSFP28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	350W / 350W CRPS	2 x Fan Modules (front-to-back airflow)
HD5624T-2Z-SI	24*100M/1G/2.5G/5G/10G Base-T+2*100G QSFP28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	Fixed single power supply	4 x fixed fans (front-to-back airflow)
HD5624T-8N-EI	24*100M/1G/2.5G/5G/10G Base-T+8*25G SFP28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	350W /350W CRPS	2 x Fan Modules (front-to-back airflow)
HD5624P-2Z-EI	24*100M/1G/2.5G/5G/10G Base-T (PoE++ 90W) + 2 x 100G QSFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	600W / 600W (by default)	2 x Fan Modules (front-to-back airflow)
HD5624P-8N-EI	24*100M/1G/2.5G/5G/10G Base-T (PoE++ 90W) + 8 x 25G SFP 28	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	600W / 600W (by default)	2 x Fan Modules (front-to-back airflow)
HD5612X-16G8N2Q-EI	12*10G SFP+ + 8*1G Base-T + 8*1G SFP + 8*25G SFP28 +2*40G QSFP+	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	350W / 350W CRPS	2 x Fan Modules (front-to-back airflow)
HD5612X-16G8N2Q-SI	12*10G SFP+ + 8*1G Base-T + 8*1G SFP + 8*25G SFP28 + 2*40G QSFP+	Console: RJ45 to RS232 Ethernet: 1G Port Storage: USB	Fixed single power supply	4 x fixed fans (front-to-back airflow)

HD5600 Physical Specifications

- HD5648T-8Z-EI: 2560Gbps (bidirectional)
- HD5648X-8Z-SI: 2560Gbps (bidirectional)
- HD5648X-8Z-DI: 2560Gbps (bidirectional)
- HD5624T-2Z-EI: 880Gbps (bidirectional)
- HD5624X-2Z-EI: 880Gbps (bidirectional)
- HD5624X-2Z-SI: 880Gbps (bidirectional)
- HD5624X-8N-EI: 880Gbps(bidirectional)
- HD5624T-2Z-SI: 880Gbps (bidirectional)
- HD5624T-8N-EI: 880Gbps (bidirectional)
- HD5624P-2Z-EI: 880Gbps (bidirectional)
- HD5624P-8N-EI: 880Gbps (bidirectional)
- HD5612X-16G8N2Q-EI: 832Gbps (bidirectional)
- HD5612X-16G8N2Q-SI: 832Gbps (bidirectional)

Weight (Net weight/Gross weight)

- HD5648T-8Z-EI: 8.18kg/10.3kg
- HD5648X-8Z-SI: 5.56kg/7.66kg
- HD5648X-8Z-DI: 6.8kg/8.9kg
- HD5624T-2Z-EI: 5kg/9kg
- HD5624X-2Z-EI: 5kg/9kg
- HD5624X-2Z-SI: 5kg/8.5kg
- HD5624X-8Z-EI: 5kg/8.5kg
- HD5624T-2Z-SI: 6.96kg/10kg
- HD5624T-8N-EI: 6.96kg/10kg
- HD5624P-2Z-EI: 6.69kg/8.8kg
- HD5624P-8N-EI: 6.96kg/10kg
- HD5612X-16G8N2Q-EI: 6.96kg/9kg
- HD5612X-16G8N2Q-SI: 6.96kg/9kg

Layer 2/Layer 3 Throughput (Mpps)

- HD5648T-8Z-EI: 3809.28Mpps (bidirectional)
- HD5648X-8Z-SI: 3809.28Mpps (bidirectional)
- HD5648X-8Z-DI: 3809.28Mpps (bidirectional)
- HD5624T-2Z-EI: 1309.44Mpps (bidirectional)
- HD5624X-2Z-EI: 1309.44Mpps (bidirectional)
- HD5624X-2Z-SI: 1309.44Mpps (bidirectional)
- HD5624X-8N-EI: 1309.44Mpps (bidirectional)
- HD5624T-2Z-SI: 1309.44Mpps (bidirectional)
- HD5624T-8N-EI: 1309.44Mpps (bidirectional)
- HD5624P-2Z-EI: 1309.44Mpps (bidirectional)
- HD5624P-8N-EI: 1309.44Mpps (bidirectional)
- HD5612X-16G8N2Q-EI: 1238.02Mpps (bidirectional)
- HD5612X-16G8N2Q-SI: 1238.02Mpps (bidirectional)

Dimensions (W x H x D) without package

- HD5648T-8Z-EI: 44.2 x 4.4 x 42 cm
- HD5648X-8Z-SI: 44.2 x 4.5 x 35.5 cm
- HD5648X-8Z-DI: 44.2 x 4.4 x 41 cm
- HD5624T-2Z-EI: 44.2 x 4.4 x 35.7 cm
- HD5624X-2Z-EI: 44.2 x 4.4 x 35.7 cm
- HD5624X-2Z-SI: 44.2 x 4.4 x 29 cm
- HD5624X-8N-EI: 44.2 x 4.4 x 35.7 cm
- HD5624T-2Z-SI: 44.2 x 4.4 x 35.7 cm
- HD5624T-8N-EI: 44.2 x 4.4 x 35.6 cm
- HD5624P-2Z-EI: 44.2 x 4.4 x 35.7 cm
- HD5624P-8N-EI: 44.2 x 4.4 x 35.6 cm
- HD5612X-16G8N2Q-EI: 44.2 x 4.4 x 35.7 cm
- HD5612X-16G8N2Q-SI: 44.2 x 4.4 x 29.1 cm

Temperature alarm

- Alarm threshold: 50°C

Dimensions (W x H x D) with package

- HD5648T-8Z-EI: 66.5 x 15 x 56.5 cm
- HD5648X-8Z-SI: 55.7 x 15 x 49.5 cm
- HD5648X-8Z-DI: 55.7 x 15 x 49.5 cm
- HD5624T-2Z-EI: 55.7 x 15 x 49.5 cm
- HD5624X-2Z-EI: 55.7 x 15 x 49.5 cm
- HD5624X-2Z-SI: 55.7 x 15 x 49.5 cm
- HD5624X-8N-EI: 55.7 x 15 x 49.5 cm
- HD5624T-2Z-SI: 55.7 x 15 x 49.5 cm
- HD5624T-8N-EI: 55.7 x 15 x 49.5 cm
- HD5624P-2Z-EI: 55.7 x 15 x 49.5 cm
- HD5624P-8N-EI: 55.7 x 15 x 49.5 cm
- HD5612X-16G8N2Q-EI: 55.7 x 15 x 49.5 cm
- HD5612X-16G8N2Q-SI: 55.7 x 15 x 49.5 cm

Environmental ranges

- Operating temperature: 0°C to 45°C
- Storage temperature: -40°C to 70°C
- Running Humidity: 10% to 90% (No condensation)
- Store Humidity: 5 to 95% (No condensation)

Operating altitude

- HD5648T-8Z-EI: 0~5km
- HD5648X-8Z-SI: 0~5km
- HD5648X-8Z-DI: 0~5km
- HD5624T-2Z-EI: 0~5km
- HD5624X-2Z-EI: 0~5km
- HD5624X-2Z-SI: 0~3km
- HD5624X-8N-EI: 0~5km
- HD5624T-2Z-SI: 0~5km
- HD5624T-8N-EI: 0~5km
- HD5624P-2Z-EI: 0~5km
- HD5624P-8N-EI: 0~5km
- HD5612X-16G8N2Q-EI: 0~5km
- HD5612X-16G8N2Q-SI: 0~3km

Power consumption

Worst case, all ports used, line-rate traffic

- HD5648T-8Z-EI: 260W
- HD5648X-8Z-SI: 135W
- HD5624T-2Z-EI: 106W
- HD5624X-2Z-EI: 64W
- HD5624X-2Z-SI: 55W
- HD5624X-8N-EI: 76W
- HD5624T-2Z-SI: 112W
- HD5624P-2Z-EI: 112W
- HD5624P-8N-EI: 116W
- HD5612X-16G8N2Q-EI: 72W

Typical power consumption

- HD5648T-8Z-EI: 257W
- HD5648X-8Z-SI: 101W
- HD5624T-2Z-EI: 73W
- HD5624X-8N-EI: 74W
- HD5624T-2Z-SI: 94W
- HD5624P-2Z-EI: 106W
- HD5624P-8N-EI: 65W
- HD5612X-16G8N2Q-EI: 49W

PoE Power Budget

- HD5624P-2Z-EI: 1000W
- HD5624P-8N-EI: 1000W

Memory

- eMMC: 8GB on all models
- DRAM: 2GB on all models

CPU

- Dual-core processor, ARM A53(1.2GHz) on following models
HD5624X-2Z-EI
HD5624X-2Z-SI
HD5624X-8N-EI
HD5624T-2Z-EI
HD5624T-2Z-SI
HD5624T-8N-EI
HD5624P-2Z-EI
HD5624P-8N-EI
HD5612X-16G8N2Q-EI
HD5612X-16G8N2Q-SI
- Dual-core processor, ARM A53(1GHz) on following models
HD5648T-8Z-EI
HD5648X-8Z-SI
HD5648X-8Z-DI

Cooling [CFM]-Total Maximum airflow

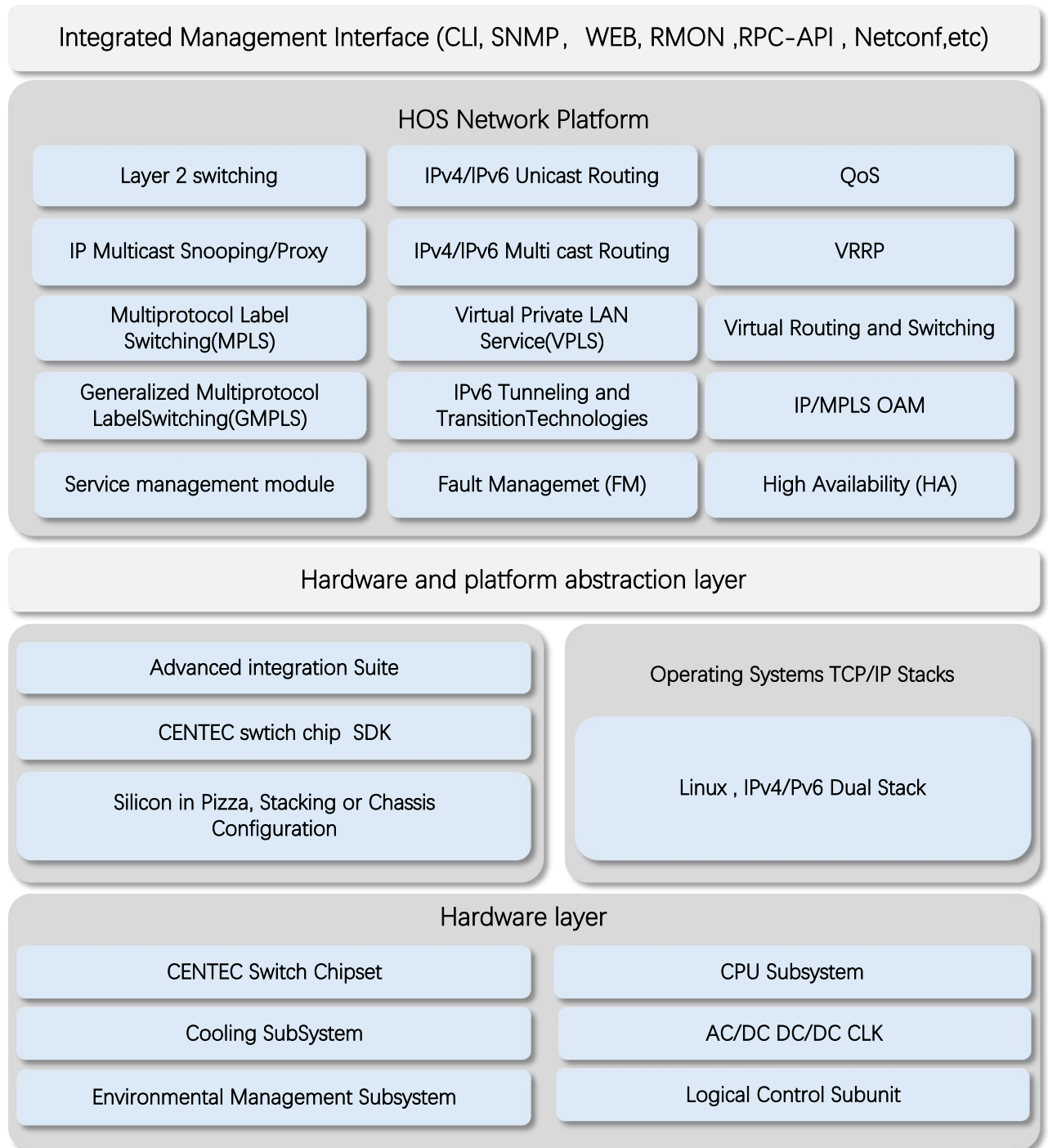
- HD5648T-8Z-EI: 120.84
- HD5648X-8Z-SI: 105.32
- HD5624T-2Z-EI: 68.76
- HD5624X-2Z-EI: 68.76
- HD5624X-2Z-SI: 46.48
- HD5624X-8N-EI: 68.76
- HD5624T-2Z-SI: 46.48
- HD5624T-8N-EI: 68.76
- HD5624P-2Z-EI: 72.78
- HD5624P-8N-EI: 72.78
- HD5612X-16G8N2Q-EI: 68.76
- HD5612X-16G8N2Q-SI: 46.48

MTBF

- EI (Swapable PSU and FAN): ≥ 90000 h (~10.3 Years)
- SI (Fixed PSU and FAN): ≥ 70000 h (~8.0 Years)

HD5600 Software Specifications

HONDAO implements a unified software platform, and the software capabilities supported by the devices are listed in the document [‘HOS Software features’](#) .



- * All HONDAO switches use a normalized software platform and image package file
- * Unified software version iteration plan
- * Unified user experience

Ordering Information

HD5600 Series

Item	Description
HD5648T-8Z-EI	10G Data Center Switch with 48*10G Base-T,8*100G QSFP28, Dual power supply modules, 4 hot-swap fan modules
HD5648X-8Z-SI	10G Enterprise and Campus Network Switch with 48*10G SFP+, 8*100G QSFP28, Fixed single power supply , 4 Fixed Fans
HD5648X-8Z-DI	10G Enterprise and Campus Network Switch with 48*10G SFP+, 8*100G QSFP28, Fixed dual power supply , 4 Fixed Fans
HD5624T-2Z-EI	10G Data Center Switch with 24*10G Base-T,2*100G QSFP28, Dual power supply modules, 2 hot-swap fan modules
HD5624X-2Z-EI	10G Date Center Switch with 24*10G SFP+, 2*100G QSFP28, Dual power supply modules , 2 Hot-swap fan modules
HD5624X-2Z-SI	10G Enterprise and Campus Network Switch with 24*10G SFP+, 2*100G QSFP28, Single Fixed power supply, 4 Fixed Fans
HD5624X-8N-EI	10G Data Center Switch with 24*10G SFP+, 8*25G SFP28, Dual power supply modules, 2 hot-swap Fan modules
HD5624T-2Z-EI	10G Data Center Switch with 24*10G Base-T, 2*100GQSFP28, Dual power supply modules, 2 hot-swap Fan modules
HD5624T-2Z-SI	10G Enterprise and Campus Network Switch with 24*10G Base-T, 2*100GQSFP28, Fixed single power supply, 4 Fixed Fans
HD5624T-8N-EI	10G Enterprise and Campus Network Switch with 24*10G Base-T,8*25G QSFP28, Dual power supply modules, 2 hot-swap fan modules
HD5624P-2Z-EI	10G Enterprise and Campus Network Switch with 24*10G Base-T (PoE++90W),2*100G QSFP28, Dual power supply modules, 2 hot-swap fan modules
HD5624P-8N-EI	10G Enterprise and Campus Network Switch with 24*10G Base-T (PoE++90W),8*25G QSFP28, Dual power supply modules, 2 hot-swap fan modules
HD5612X-16G8N2 Q-EI	10G Enterprise and Campus Network Switch with 12*10G SFP+ , 8*1G Base-T, 8*1G SFP, 8*25G SFP28, 2*40G QSFP+ , Dual power supply modules, 2 Hot-swap fan modules
HD5612X-16G8N2 Q-SI	10G Enterprise and Campus Network Switch with 12*10G SFP+ , 8*1G Base-T, 8*1G SFP, 8*25G SFP28, 2*40G QSFP+, Single Fixed power supply, 4 Fixed Fans

AC/DC Power Supplies use for **HD5600** Series EI model

Items	Description
PSU-350-AC-AFO	HD5600 Series 350 W AC power supply (front-to-back airflow)
PSU-550-AC-AFO	HD5600 Series 550 W AC power supply (front-to-back airflow)
PSU-550-DC-AFO	HD5600 Series 550 W DC power supply (front-to-back airflow)
PSU-600-AC-AFO	HD5600 Series 600 W AC POE power supply (front-to-back airflow)
PSU-600-DC-AFO	HD5600 Series 600 W DC POE power supply (front-to-back airflow)
PSU-900-AC-AFO	HD5600 Series 900 W AC POE power supply (front-to-back airflow)
PSU-900-DC-AFO	HD5600 Series 900 W DC POE power supply (front-to-back airflow)
PSU-1200-AC-AFO	HD5600 Series 1200 W AC POE power supply (front-to-back airflow)
PSU-1200-DC-AFO	HD5600 Series 1200 W DC POE power supply (front-to-back airflow)

Software Licenses

Items	Description
Software License	EB, Basic L3 software features, Preinstalled
Software License	MS, L3 enhance features software license key

Accessory of HD5600 Series

Items	Front Mounting	Rear Mounting	Screw	Power Cord	Console (RS232 to RJ45)
HD5648T-8Z-EI	2	2	14	2	1
HD5648X-8Z-SI	2	/	14	1	1
HD5648X-8Z-DI	2	/	14	2	1
HD5624X-2Z-EI	2	2	14	2	1
HD5624X-2Z-SI	2	/	14	1	1
HD5624X-8N-EI	2	2	14	2	1
HD5624T-2Z-EI	2	2	14	2	1
HD5624T-2Z-SI	2	/	14	1	1
HD5624T-8N-EI	2	2	14	2	1
HD5624P-2Z-EI	2	2	14	2	1
HD5624P-8N-EI	2	2	14	2	1
HD5612X-16G8N2Q-EI	2	2	14	2	1
HD5612X-16G8N2Q-SI	2	/	14	1	1