

Overview

HP Altoline 5712 Switch Series

Models

HP Altoline 5712 48XG 6QSFP+ x86 ONIE AC Front-to-Back Switch

JL167A

HP Altoline 5712 48XG 6QSFP+ x86 ONIE AC Back-to-Front Switch

JL168A

Key features

- High 10GbE port density and low latency for demanding applications.
- ONIE boot loader for choice of network OS and easy installation.
- OCP-certified, Open-networking and disaggregated solution for customer choice.
- VXLAN for efficient network virtualization overlay solutions.
- x86 CPU controller, redundant fans and power supplies for data center deployments.

Product overview

The HP Altoline 5712 switch is a top-of-rack (TOR) or spine switch for high-performance data centers. In a compact 1RU form factor, the switch provides line-rate L2 and L3 switching across up to 48 x SFP+ ports, with 6 x 40GbE QSFP+ uplink connections.

The HP Altoline 5712 switch can be deployed as a TOR switch supporting 10GbE server connections, or as a spine switch, supporting 10GbE interconnects.

The HP Altoline 5712 is a bare-metal switch loaded with the Open Network Install Environment (ONIE), which supports the installation of compatible independent switch OS offerings.

Features and benefits

Data center optimized

- **Flexible high port density**
the HP Altoline 5712 Switch Series enables scaling of the server edge with 10GbE server connection, with 40GbE uplinks, to new heights with high density delivered in a 1RU design.
- **High-performance switching**
cut-through and nonblocking architecture delivers low latency (600 - 720 nanosecond for 40GbE) for very demanding enterprise applications; the switch delivers high-performance switching capacity and wire-speed packet forwarding
- **Hot/cold aisle support**
models available with front-to-back (port-to-power) or back-to-front (power-to-port) airflow
- **Redundant fans and power supplies**
1+1 internal redundant and hot-pluggable power supplies and N+1 redundant fan trays enhance reliability and availability
- **VXLAN hardware support**
supports VXLAN VTEP overlay technologies

Manageability

- **Out-of-band interface**
isolates management traffic from user data plane traffic for complete isolation and total reachability, no matter what happens in the data plane
- **ONIE bootloader**
switch is loaded with Open Network Install Environment (ONIE) software installer
- **Intel x86 CPU**
provides high performance support of widely available, industry standard software and utilities

Overview

Layer 2 switching

- **VLAN support**
provides support for 4,096 VLAN IDs

Additional information

- **Low power consumption**
typical operation uses just 267W of AC power

Warranty and support

- **3-year Warranty**
advance hardware replacement with 10-calendar-day delivery (available in most countries)
- **Electronic and telephone support**
limited electronic and business-hours telephone support is available from HP for the entire warranty period; to reach our support centers, refer to <http://www.hp.com/networking/contact-support>; for details on the duration of support provided with your product purchase, refer to www.hp.com/networking/warrantysummary
- **Software releases**
to find software for your product, refer to <http://www.hp.com/networking/support> ; for details on the software releases available with your product purchase, refer to www.hp.com/networking/warrantysummary

Technical Specifications

HP Altoline 5712 48XG 6QSFP+ x86 ONIE AC Front-to-Back Switch (JL167A)

I/O ports and slots	48 SFP+ 1/10GbE ports (IEEE 802.3ae Type 10GBASE-ER, IEEE 802.3ae Type 10GBASE-LR, IEEE 802.3ae Type 10GBASE-SR, IEEE 802.3z Type 1000BASE-SX, IEEE 802.3z Type 1000BASE-LX) 6 QSFP+ 40GbE ports	
Additional ports and slots	1 RJ-45 serial console port 1 RJ-45 out-of-band management port 1 USB 2.0	
Power supplies	2 power supply slots 1 minimum power supply required includes: 2 x PSUs ()	
Fan tray	5 fan tray slots Switch comes with five (5) fan trays (port to power airflow)	
Physical characteristics	Dimensions	17.32(w) x 18.5(d) x 1.72(h) in (44.00 x 47.0 x 4.4 cm)
	Weight	18.52 lb (8.4 kg)
Memory and processor	Intel Atom C2538 quad-core x86 processor @ 2.4 GHz, 8 GB DDR3 SDRAM; Packet buffer size: 12 MB, 16 GB SD Card	
Performance	40 Gbps Latency	> .6 μ s
	Throughput	up to 1 Bpps
	Routing/Switching capacity	1440 Gbps
	Routing table size	64000 entries (IPv4), 20000 entries (IPv6)
	MAC address table size	320000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	5% to 95%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Electrical characteristics	Frequency	50/60 Hz
	Voltage	90 - 264 VAC, rated (depending on power supply chosen)
	Maximum power rating	315 W
	Idle power	267 W
	Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PSU Efficiency: Up to 93% for AC PSUs
Safety	cUL Certified; EN 60950; EN 55022 Class A; VCCI Class A; ROHS Compliance; FCC Class A: Regulations for Radio Frequency Devices for Electromagnetic Compliance; UL	
Emissions	FCC part 15 Class A; EN 55022 Class A; VCCI	
Immunity	ESD	EN 60950
	EFT/Burst	IEC 68-2-14
Management Services	Command-line interface; Out-of-band management; SNMP manager; Telnet; FTP Refer to the HP website at: http://www.hp.com/networking/services or details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

Technical Specifications

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Accessories

HP Altoline 5712 Switch Series accessories

Transceivers

HP X240 40G QSFP+ QSFP+ 1m Direct Attach Copper Cable	JG326A
HP X240 40G QSFP+ QSFP+ 3m Direct Attach Copper Cable	JG327A
HP X240 40G QSFP+ QSFP+ 5m Direct Attach Copper Cable	JG328A
HP X240 40G QSFP+ to 4x10G SFP+ 1m Direct Attach Copper Splitter Cable	JG329A
HP X240 40G QSFP+ to 4x10G SFP+ 3m Direct Attach Copper Splitter Cable	JG330A
HP X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable	JG331A
HP X140 40G QSFP+ LC LR4 SM 10km 1310nm Transceiver	JG661A
HP X140 40G QSFP+ MPO SR4 Transceiver	JG325B
HP X140 40G QSFP+ MPO MM 850nm CSR4 300m Transceiver	JG709A

Summary of Changes

Date	Version History	Action	Description of Change:
17-Jul-2015	From Version 1 to 2	Changed	Error fixed on Product Overview

To learn more, visit: <http://www.hp.com/networking>

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