Overview

HP Altoline 6700 Switch Series
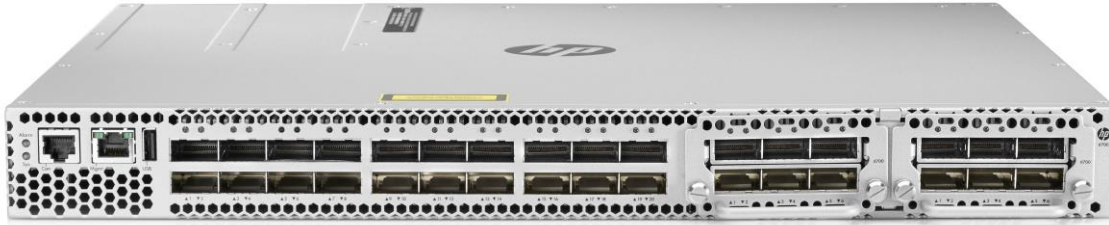
Models

HP 6700-32QSFP+ ONIE AC Front-to-back Switch	JL114A
HP 6700-32QSFP+ ONIE AC Back-to-front Switch	JL115A

Key features

- High 40GbE port density and low latency for demanding applications.
- ONIE boot loader for choice of network OS and easy installation.
- Open-networking and disaggregated solution for customer choice.
- VXLAN for efficient network virtualization overlay solutions.
- 40GbE and redundant fans and power supplies for data center deployments.

Product overview

The HP Altoline 6700 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 32 x QSFP ports, supporting up to 32 x 40GbE connections or 96 x 10GbE with 8 x 40GbE uplink connections.

The HP Altoline 6700 switch can be deployed as a TOR switch supporting 10GbE or 40GbE server connections, or as a spine switch, supporting 10GbE or 40GbE spine interconnects. The switch provides 20 fixed QSFP ports and two module slots, each capable of supporting a 6 x QSFP module, pre-installed.

The HP Altoline 6700 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 6700 Switch Series enables scaling of the server edge with 40GbE spine and ToR deployments to new heights with high-density 32-port solutions delivered in a 1RU design. Up to 24 40GbE QSFP+ ports can also be configured as four 10GbE ports by using a 40GbE-to-10GbE splitter cable providing up to 96 10GbE ports with eight 40GbE uplinks.
- **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**

Overview

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

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 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 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 6700-32QSFP+ ONIE AC Front-to-back Switch (JL114A)

I/O ports and slots	32 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	Freescale PPC @ 1.2 GHz, 2 GB DDR3 SDRAM; Packet buffer size: 12 MB, 8 GB SD Card

Performance	**40 Gbps Latency**	> .6 µs
	Throughput	up to 1440 Mpps
	Routing/Switching capacity	2560 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	Command-line interface; Out-of-band management; SNMP manager; Telnet; FTP	
Services	Refer to the HP website at: 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.	

HP 6700-32QSFP+ ONIE AC Back-to-front Switch (JL115A)

I/O ports and slots	32 QSFP+ 40GbE ports

QuickSpecs

Technical Specifications

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 (power to port airflow)	
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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
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Accessories

HP Altoline 6700 Switch Series accesories

Transceivers

HP X240 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	JG326A
HP X240 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	JG327A
HP X240 40G QSFP+ to 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:
22-May-2015	From Version 1 to 2	Added	Product image added
		Changed	Error fixed on footer

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