

Faster, Virtual and Proven Networking for HP BladeSystem

Gigabit and 10G Ethernet Interconnect Options for HP BladeSystem™

Made by BLADE Network Technologies

- Advanced networking features
- Lowest power consumption
- Interoperable with Cisco® and other network vendors*
- Lowest cost
- Highest performance
- Integration with HP Systems Insight Manager and HP OpenView
- Virtual machine-aware networking with VMready™

BLADE Network Technologies

BLADE is the market-leading supplier of Gigabit and 10 Gigabit Ethernet network solutions for HP BladeSystem and HP “scale-out” server and storage racks.

Other Solutions from BLADE Network Technologies

BLADE's RackSwitch™ G8000, G8100 and G8124 are designed specifically to aggregate the networking of servers and storage systems.

- Powerful Gigabit and 10G Ethernet performance for Web 2.0, HPC and Cloud Computing
- Rack-level network virtualization

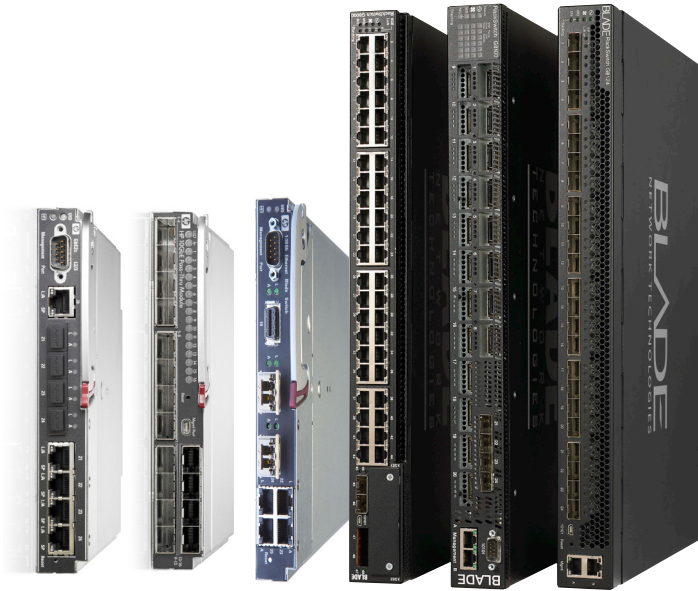
- Server-friendly airflow for cooler data centers
- Low power consumption
- Easy administration with BLADEHarmony™ Manager

Rackonomics

BLADE's “Rackonomics” approach reduces TCO by standardizing on a unified and affordable rack-level network infrastructure.

BLADEOS software enables network virtualization, network mobility, and virtual machine movement for the entire rack.

HPGbE2c L2/3,
HP 1:10Gb BL-c,
HP 10Gb Pass Thru Module,
RackSwitch G8000, G8100 and
G8124



For more information:

<http://www.bladenetwork.net/hp>

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HP BladeSystem
Solution Builder



BLADE
NETWORK TECHNOLOGIES

* <http://tolly.com/DocDetail.aspx?DocNumber=208336>



HP Blade Interconnects from BLADE Network Technologies

BLADE Network Technologies RackSwitch



HP 10Gb Pass Thru Module
(538113-B21)



HP GbE2c Layer 2/3
(438030-B21)



HP 1:10Gb BL-c
(438031-B21)



RackSwitch G8000
1/10G Aggregation
(BN-8000(F/R)-BDL)



RackSwitch G8124 (BN8124(F/R)-BDL)



RackSwitch G8100 (BN8100(F/R)-BDL)

Features

HP Advanced Function Software (HP AFS)	N/A	HP GbE2c L2/3 ADVD FNCT SW p/n: 485192-B21	HP 1:10GbE BLc ADVD FNCT SW p/n: 485193-B21	—	—
Form Factor	Single Wide	Single Wide – Blade Switch	Single Wide – Blade Switch	1U Rack	1U Rack
Ports	16 1/10Gb Downlinks 16 1/10Gb SFP+ Uplinks	16 Downlinks & 4 port selectable RJ45/Fiber + 1 port Fixed RJ45 Uplink	16 1G Downlinks & 4 x 1G RJ45 and 3 x 10G Uplinks	48 1GE (44 RJ-45 & 4 SFP) Up to 4 10GE CX4 or SFP+	G8124: 24 * SFP+ 10GbE G8100: 20 * CX4 10GbE & 4 SFP+ 10GbE
10GbE Ports	32	—	3	Up to 4 * CX4 or SFP+	G8124: 24 * SFP+ G8100: 20 * CX4 & 4 * SFP+
1G Management Ports	0	1	1	1	1
Max Throughput (bidirectional Gbps)	320 Gbps	48 Gbps	128 Gbps	176 Gbps	480 Gbps
Average Port to Port Latency	0.595 μs	3.15 μs	10G: 1.99 μs / 1G: 3.19 μs	4.6 μs	G8100: 0.36 μs / G8124: 0.68 μs
Configuration and Management	Via HP Onboard Administrator	Browser, BLADEOS, isCLI, BLADEHarmony Manager ²	Browser, BLADEOS, isCLI, BLADEHarmony Manager ²	Browser, isCLI, BLADEHarmony Manager	Browser, isCLI, BLADEHarmony Manager
Software	—	BLADEOS (L2/3)	BLADEOS (L2/3)	BLADEOS (L2/3)	BLADEOS (L2/3)
Max VLANS	—	1000	1000	1024	1024
Max MAC Entries	—	8K	16K	16K	16K
Static Link Aggregation (Groups/Members)	—	12/6	12/6	52/8	12/12
802.3ad Dynamic Link Aggregation with LACP	—	Yes	Yes	Yes	Yes
Uplink Failure Detection ² /Link Layer Discovery Protocol ²	—	Yes ²	Yes ²	Yes	Yes
Jumbo Frames	—	9K	9K	9K	9K
802.1d Spanning Tree / PVRST	—	Yes	Yes	Yes	Yes
802.1s MSTP/802.1w RSTP	—	Yes	Yes	Yes	Yes
Spanning Tree Groups	—	128	128	128	128
802.1x Port Access Control / 802.3x Flow Control	—	Yes	Yes	Yes	— /Yes
DHCP for Management Port	—	Yes	Yes	Yes	Yes
BOOTP/DHCP	—	Yes/—	Yes/ —	— /Yes	—/Yes
BPDU Guard	—	Yes	Yes	Yes	Yes
PriVLAN Edge	—	Yes ²	Yes ²	Yes	Yes
Port Fast Forwarding	—	Yes	Yes	Yes	Yes
Manual MAC Address Entry	—	Yes	Yes	Yes	Yes
OSPF, RIP v1, v2	—	Yes ²	Yes ²	Yes	G8124: Yes/G8100: —
Virtual Router Redundancy Protocol (VRRP)	—	Yes	Yes	Yes	Yes
IPv6 capable	—	—	Yes	Yes	Yes
SNMP	—	SNMP v1/v2c/v3	SNMP v1/v2c/v3	SNMP v1/v2c/v3	SNMP v1/v2c/v3
Stacking	—	—	Yes ¹	Yes	—
SFLOW	—	Yes	Yes ²	Yes	Yes
VMready Network Virtualization	—	—	Yes ²	Yes	G8124: Yes / G8100: —
Power	68W	30W	50W	120W	G8100: 120W; G8124: 115W to 168W
Supported HP BladeSystem Chassis	c3000, c7000, c7000cg	c3000, c7000, c7000cg	c3000, c7000, c7000cg	BladeSystem, Rack Servers and Storage	BladeSystem, Rack Servers and Storage
Recommended when your main concern is	Low cost unmanaged 10G	Optical connectivity, low cost and full feature set	Consolidating uplink ports Investment protection	Stacking, zero over-subscription, low power consumption, airflow	Lossless 10G, low latency, low power consumption, airflow

¹ Add-on from BLADE, additional purchase required

² Available with HP AFS