

# Virtual, Cooler and Easier Networking for Low Latency Applications

## Build Ultra-Fast, Converged Networks with BLADE

BLADE's RackSwitch family of switches offer extremely low latency and Lossless Gigabit & 10G Ethernet fabrics. Here are some of the benefits of choosing RackSwitch:

### Designed for Data Center Networks

- Optimized airflow for data center server and storage systems—not the wiring closet

### Energy Efficient

- Consumes 65% less power than the competition (less than two light bulbs)
- Every Watt saved by networking equipment saves 3 Watts in the data center

### Freedom of Choice

- Standards-based interoperability in an open ecosystem of data center solutions
- Cost Effective

### Cloud Ready and Scalable

- Scale massive networks with thousands of switches

### Agile Virtualization

- Secure your VM's during migration with virtual machine aware networking

### Product information

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

### RackSwitch Solutions

<http://www.bladenetwork.net/10G>

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

## BLADE Network Technologies

BLADE is the leading supplier of Gigabit and 10 Gigabit Ethernet network solutions. BLADE's customers include 300 of the Fortune 500 across 26 industry segments.

### Rackonomics

BLADE's "Rackonomics" approach reduces total cost of ownership 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.



From left to right: RackSwitch G8124, G8100 and G8000

### Sales Contacts—Americas





	Dan Grubich, VP	+1 (510) 468-2129	daniel.grubich@bladenetwork.net
	Tracy Hickox, VP	+1 (443) 995-8486	tracy.hickox@bladenetwork.net
	Derek Beattie	+1 (443) 986 3271	derek.beattie@bladenetwork.net
	Matt Hammel	+1 (650) 678-3681	matt.hammel@bladenetwork.net
	Scott Irwin	+1 (214) 263-5570	scottirwin@bladenetwork.net
	Richard Jessop	+1 (347) 410-0177	richard.jessop@bladenetwork.net
	Cole Kiblinger	+1 (510) 984-2814	cole.kiblinger@bladenetwork.net
	Scott Lorditch	+1 (720) 839-7192	scott.lorditch@bladenetwork.net
	Stewart Raphael	+1 (914) 293-7043	stewart.raaphael@bladenetwork.net
	Paul Skiba, Fed. Sales	+1 (240) 357-3984	paul.skiba@bladenetwork.net
	Matt Slavin	+1 (918) 760-7129	matt.slavin@bladenetwork.net
	Vince Sykes	+1 (845) 406-1386	vince.sykes@bladenetwork.net

### Europe, Middle East, and Africa

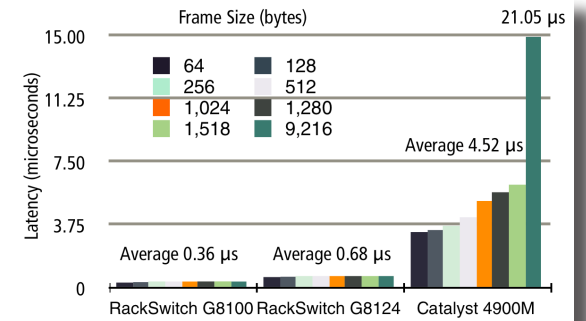
	Charles Ferland, VP	+49 (0)1511265 0830	charles.ferland@bladenetwork.net
	William Soull (South)	+49 (0) 1718 549 172	william.soull@bladenetwork.net
	Michel Altaburu	+33 (0) 629 136 917	michel.altaburu@bladenetwork.net
	Thierry Bage	+33 6 07 54 59 25	thierry.bage@bladenetwork.net
	Igor Marty	+33 620 739 269	igor.marty@bladenetwork.net
	Errol Holas	+44 (7775) 644 248	errol.holas@bladenetwork.net
	Alex Hollingsworth	+44 7956 415 302	alex.hollingsworth@bladenetwork.net
	James Schneider	+44 (0)7772 558 101	james.schneider@bladenetwork.net
	Kamran Siddiqui (ME)	+97 1509 106152	kamran.siddiqui@bladenetwork.net

### Asia-Pacific

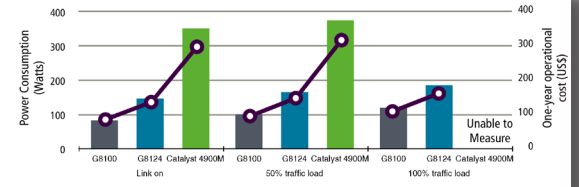
	Peter Hall, VP	+61 4 177 333 75	peter.hall@bladenetwork.net
	Dave Humphries	+61 417 557 558	dave.humphries@bladenetwork.net
	Kavish Shah	+61 430 525 481	kavish.shah@bladenetwork.net
	Victor Chen	+86 139 110 67788	victor.chen@bladenetwork.net
	Jilie Deng	+86 15801393384	jilie.deng@bladenetwork.net
	Xiaohong E	+86 13910288041	e.xiaohong@bladenetwork.net
	Lin Kang	+86 13601977485	lin.kang@bladenetwork.net
	Wei Wang	+86 13552373763	wei.wang@bladenetwork.net
	Yan Zhang	+86 13810929135	yan.zhang@bladenetwork.net
	Jing Zhan	+86 13917363367	jing.zhan@bladenetwork.net
	Ling Zhu	+86 13901010918	ling.zhu@bladenetwork.net
	Xiaodou Zuo	+86 13810422738	xiaodou.zuo@bladenetwork.net
	Hak-Yeul (Micky) Kim	+82 10-6592-0820	hykim@bladenetwork.net
	CH Park	+82 10-3729-9431	ch.park@bladenetwork.net
	Yasunobu Ohta	+81 80-5468-3268	yasunobu.ohta@bladenetwork.net
	Yoshisato Ushio	+81 90-8394-8752	yoshisato.ushio@bladenetwork.net

				
<b>Specifications Summary</b>		G8000 1/10G Aggregation Switch Part Number: BN-8000(F/R)-BDL BN-8000F-DC (DC PSU)	G8100 10G Low Latency CX4/SFP+ Part number: BN-G8100(F/R)-BDL	G8124 10G Low Latency SFP+ Part number: BN-G8124(F/R)-BDL BN-8124F-DC (DC PSU)
Form Factor		1U Rack	1U Rack	1U Rack
Ports		48 1GE (44 RJ-45 & 4 SFP) Up to 4 10GbE CX4 or SFP+	20 * CX4 10GbE & 4 SFP+ 10GbE	G8124: 24 * SFP+ 10GbE
10GbE Ports		4 * CX4 or SFP+	20 * CX4 10GbE & 4 SFP+ 10GbE	24 * SFP+ 10GbE
Line-rate 1 GbE Ports		48	—	—
Management Ports		1 * 1 Gbps	1 * 1 Gbps	1 * 1 Gbps
Max Thru-put (bi-directional) Gbps		176 Gbps	480 Gbps	480 Gbps
Average Port to Port Latency		4.6 µs	0.36 µs	0.68 µs
Configuration and Management		Browser, BLADEOS isCLI, BLADEHarmony	Browser, BLADEOS, isCLI, BLADEHarmony	Browser, BLADEOS, isCLI, BLADEHarmony
Software		BLADEOS (L2/3)	BLADEOS (L2/3)	BLADEOS (L2/3)
Max VLANs (configured/choices)		1024	1024	1024
Max MAC Entries		16K	16K	16K
Static Link Aggregation (Groups/members)		52/8	12/12	12/12
802.3ad LACP		Yes	Yes	Yes
Uplink Failure Detection (UFD)		Yes	Yes	Yes
Link Layer Discovery Protocol (LLDP)		Yes	—	—
Jumbo Frames		9K	9K	9K
802.1d / PVST+ / PVRST+ / 802.1s MSTP / 802.1w RSTP		Yes	Yes	Yes
Spanning Tree Groups		128	128	128
802.1x Port Access Control		Yes	—	—
802.3x Flow Control		Yes	—	Yes
IGMP v1/v2/v3		Yes	Yes	Yes
BOOTP		—	—	Yes
DHCP		Yes	Yes	Yes
BPDUGuard		Yes	Yes	Yes
PrivWLAN Edge		Yes	Yes	Yes
Port Fast Forwarding		Yes	Yes	Yes
Static FDB		Yes	Yes	Yes
OSPF, BGP, VRRP, RIP v1, v2		Yes	—	Yes
Redundancy/Failover		Yes	Yes	Yes
IPv6 Capable		Yes	Yes	Yes
SNMP		v1/v2c/v3	v1/v2c/v3	v1/v2c/v3
Stacking		Yes	Mgmt. Only	Mgmt. Only
Fibre Channel over Ethernet (FCoE)		—	—	Planned
Power		120W	120W	115W to 168W
Recommended when your main concerns are:		Stacking, zero over-subscription, low power consumption, airflow	Lossless 10G, low latency, low power consumption, airflow	Lossless 10G, low latency, low power consumption, airflow

### 8x Lower Latency\*



### 65% Lower Power\*



\* <http://tolly.com/DocDetail.aspx?DocNumber=209115>

### Certified Interoperability into Cisco networks\*\*



- Auto-Negotiation
- 802.1p/Q VLAN Tag Propagation
- Jumbo Frame support
- Link Aggregation Control Protocol (EtherChannel)
- 10GbE LAN PHY support
- Rapid Spanning Tree Protocol (RSTP or PVRST+)
- Multiple Spanning Tree Protocol (MSTP)

\*\* <http://tolly.com/DocDetail.aspx?DocNumber=209116>