



Highlights

- 48 × 1 GbE RJ45 ports and four standard 10 GbE SFP+ ports
 - Choice of airflow direction, allowing for significant savings in cooling costs
 - Low 130 W power rating and variable speed fans help reduce power consumption
 - Network virtualization—VMready automatically detects virtual machine movement from one physical server to another
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IBM BNT RackSwitch G8052

Purpose built for the data center

The IBM BNT RackSwitch™ G8052 is an Ethernet switch specifically designed for the data center, providing a virtual, cool and easy network solution.

The BNT RackSwitch G8052 is virtual—providing rack-level virtualization of networking interfaces for a rack full of server and storage systems—decoupling the scaling of networking and computing capacity via on-switch VMready™ software. VMready enables the movement of virtual machines—providing matching movement of VLAN assignments, ACLs, and other networking and security settings. VMready works with all leading VM providers (VMware, Citrix Xen, Microsoft®, etc.).

The RackSwitch G8052 is cool—implementing a choice of directional cooling to maximize data center layout and provisioning. Its superior airflow design complements the hot-aisle and cold-aisle data center cooling model.

The RackSwitch G8052 is easy—with server-oriented provisioning via point-and-click management interfaces, along with the optional BLADEHarmony Manager software package for updating large groups of switches.

The RackSwitch G8052 offers 48x1 Gigabit Ethernet ports and four standard (no uplink module necessary) 10 Gigabit Ethernet ports in a 1U footprint. Designed with top performance in mind, the G8052 provides line-rate, high-bandwidth switching, filtering, and traffic queuing without delaying data, and large data-center-grade buffers to keep traffic moving. Redundant power and fans along with numerous high availability features mean that the G8052 is always available for business-sensitive traffic.



IBM BNT RackSwitch G8052 at a glance	
Form factor	1U
Models	IBM BNT RackSwitch G8052R (7309G52) IBM BNT RackSwitch G8052F (730952F)
Ports	48 x 1 GbE (48RJ-45), 4 x 10 GbE SFP+
Performance	176 Gbps switching throughput (full duplex) Latency of 1.7µS
Stacking	Yes, up to 8 switches (2Q 2011)
Redundancy	Redundant power and fans standard
Power	120 W
Dimensions	17.3" wide, 17.5" deep, 1 RU high
Weight	5.45 kg (11.99 lb)
LEDs	System LEDs to indicate status Stacking LEDs to indicate Master/Member
Airflow	Front-to-rear or rear-to-front cooling Redundant hot swappable field-replaceable fans with variable speed to reduce power draw
Power	Redundant load-sharing hot swappable power supply modules, operating at 130 W, 50 - 60 Hz, 100 - 240 V ac autoswitching per module
Warranty	3-year, next business day replacement, phone support and software upgrades Service upgrades and extensions available

IBM BNT RackSwitch G8052 at a glance	
Environmental Specifications	
Temperature	Ambient operating: 0° C to +40° C
Relative humidity	Non-condensing, operating 10 to 90%
Altitude	Operating 3,050 m (10,000 feet)
Acoustic noise	Less than 65 dB
Software Features	
Security	LDAP 802.1x with VLAN assignment Private VLAN edge RADIUS TACACS+ Wire Speed Filtering Flexible ACL combinations– L2-L4 criteria: Source and Destination MAC, IP, TCP/UDP Ports SSH v1, v2 HTTPS Secure BBI MAC Address move notification SCP Shift B Boot menu (Password Recovery/Factory Default)
VLANs	Port-based VLAN 4096 VLAN IDs supported 1024 Active VLANs (802.1Q) 802.1x With Dynamic VLAN assignment Private VLAN Edge

IBM BNT RackSwitch G8052 at a glance	
Trunking	LACP Static Trunks (EtherChannel) Configurable Trunk Hash algorithm 3
Spanning Tree	Multiple Spanning Tree (802.1s) Rapid Spanning Tree (802.1w) Fast Uplink Convergence PVRST+
Quality of Service	QoS 802.1p DSCP Weighted Round Robin Metering 4 MB Buffers for Queuing
Routing Protocols	128 Static Routes Layer 2/3 Static Routes RIP v1/v2 OSPF v3 BGP IPv6
High Availability	Uplink Failure Detection HotLinks Virtual Router Redundancy support (VRRP) Layer 2 failover
Multicast	IGMP v1, v2, v3 Snooping with 2K IGMP groups
Monitoring	Port Mirroring ACL-based mirroring sflow version 5

IBM BNT RackSwitch G8052 at a glance	
Management Features	
Clients	ISCLI (Cisco-like) Browser-based client, SSH, or Telnet Netboot
Standard protocols	SNMP v1, v2c, v3 RMON Secondary NTP Support Accept DHCP LLDP 32K MAC Table 9K Jumbo Frames 802.3X Flow Control
Upgrades	Upgrade firmware via serial or TFTP Dual software images
Associated Options	
SFP, SFP+ Options	BNT SFP+ Transceiver (46C3447) BLADE 1000BASE-T (RJ-45) SFP Transceiver (81Y1618) BLADE 1000BASE-SX SFP Transceiver (81Y1622)
SFP+ Copper Direct Attach Cables	0.5M Molex DAC SFP+ Cable (59Y1932) 1M Molex DAC SFP+ Cable (59Y1936) 3M Molex DAC SFP+ Cable (59Y1940) 7M Molex DAC SFP+ Cable (59Y1944)
Optical Cables	1M LC-LC Fiber Cable (88Y6851) 10M LC-LC Fiber Cable (88Y6854) 25M LC-LC Fiber Cable (88Y6857)
Rack Kit	BNT 19 inch Flexible 4 Post Rail Kit (49Y4284)



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For more information

To learn more about the BNT RackSwitch G8052, visit: ibm.com/systems/x/hardware/options or contact your IBM marketing representative or IBM Business Partner.