

MODELS

Compaq GIGAswitch/Router
GIGAswitch/Router system with
8-slot chassis, backplane, and
fan
3X-DGRCA-AA or
117932-B21

GIGAswitch/Router system with
16-slot chassis, backplane,
switch fabric, and fan
3X-DGRCA-BA or
117933-B21

Product Description

With the Internet and bandwidth-hungry applications full of rich multimedia content dragging down your network—and your business productivity—you need to give your LAN backbone a performance boost that will stand up to the most demanding loads and provide control and security throughout the network. The GIGAswitch/Router system will stand up to even the most challenging requirements. This switch router, designed for Gigabit and Fast Ethernet delivers up to 32 Gbps throughput, plus Layer 2, Layer 3, and Layer 4 switching and advanced capabilities at wire speed. It is the ideal choice for maximum performance and control of your network.

FEATURES

High Availability/High-Performance

The winners in today's Internet-dependent world are those businesses that most quickly establish a presence on-line, use change as a strategic weapon and offer *Non-Stop™* operations. Keeping your applications continuously available is a major challenge, especially when your network and web servers are in constant danger of being overloaded due to the increasing demands of the Internet.

Compaq's suite of network solutions, including our award-winning switch/routers, load-balancing solutions, and robust servers and services, can provide an unparalleled and scalable high availability environment without sacrificing performance. Your business can truly be *Non-Stop*.

Designed as a backbone LAN/WAN router the GIGAswitch/Router is also ideal for aggregating servers located in a central server farm. The GIGAswitch/Router provides the performance, control and high availability required to optimize application traffic throughout the entire network from the servers to the desktops.

Performance: The GIGAswitch/Router system delivers outstanding performance. The non-blocking architecture delivers up to 32 million packets per second throughput across the 30 Gbps switch fabric. The switch maintains this throughput while providing full-function unicast, multicast support and IP/IPX routing at gigabit speeds on all ports. In fact, the GIGAswitch/Router maintains wire-speed performance even when Quality of Service and security filters are turned on.

Control: The GIGAswitch/Router has comprehensive Quality of Service based on the Layer 2, 3 or 4 information available in the packets. This allows you to determine the relative importance of users, servers and even the applications on your network. With security becoming more of a concern, the GIGAswitch/Router supports over 20,000 access control lists and extensive authentication for the WAN connections.

High Availability: The GIGAswitch/Router is designed for maximum up time with redundant fans, power supplies, switch fabrics and switch control processor modules available. The switch also supports port trunking, allowing for multiple connections to protect against links failing.

Speed and Scalability

If you thought you had to make a choice between speed and functionality, think again. The GIGAswitch/Router system gives you the "best of both worlds" on a single, powerful platform. Now you can build high-performance Intranets and VLAN-segmented networks without sacrificing performance. Even using advanced capabilities such as Quality of Service or security via access control lists does not affect the performance.

Compaq's GIGAswitch/Router system combines wire-speed performance, pinpoint control, and superior routing capacity to handle today's and tomorrow's demanding network traffic.

You need a network backbone switch that meets the demands of your IT infrastructure today and tomorrow. Scaling up to 120 10/100Base-TX ports or 30 Gigabit Ethernet ports, no network challenge is too large for the GIGAswitch/Router. The switch also supports over 4,000 VLANs, 250,000 Layer 3 routes and up to 4,000,000 Layer 4 flows, providing all the capacity you need now and in the future. For your Wide Area Network requirements, the GIGAswitch/Router offers two options: a 4-port serial linecard for connections up to T1/E1 speeds and a 2-port HSSI linecard for WAN speeds as high as T3/E3. These options give the GIGAswitch/Router the ability to support 60 T1/E1 connections or 30 T3/E3 connections within a single chassis.

Functionality

Using a GIGAswitch/Router to replace LAN-based software routers will turbo charge the environments. The full-function wire-speed IP/IPX routing enables the switch to scale seamlessly as you add more complex and latency-sensitive applications to your network. When connecting to the Internet, the GIGAswitch/Router can use the BGP-4 standard to communicate directly with the Internet routers. This system also turns your network into an efficient multicast medium, supporting industry-standard protocols such as DVMRP, per-port IGMP, and PIM both (Dense and Sparse Modes).

The GIGAswitch/Router has a unique ability to segment traffic based on Layer 4 flows (for instance on TCP or UDP flows). This allows you to prioritize and direct specific application traffic, thereby optimizing the important traffic on your network.

MANAGEMENT

Managing the GIGAswitch/Router system is easy, thanks to our web-based management tool, Compaq CNMS GIGAswitch/Router Manager, which provides policy-based configuration and monitoring from any frames-compatible web browser. This tool gives you access to full RMON and RMON2 information for proactive planning of bandwidth growth and efficient network troubleshooting. Application-level statistics can be viewed on a per-port basis. In addition, each port supports RMON packet capture and filter, so you can store traffic information and export files to an external analyzer for decoding. The product also supports an extensive command line interface, which allows configuration of all the switching and routing capabilities.

SPECIFICATIONS

Standards Supported

IP Routing	RIPv1/v2, OSPF, BGP-4
IPX Routing	RIP, SAP
Multicast	IGMP, DVMRP, PIM-DM, PIM-SM
Quality of Service	Layer 2,3,4 and RSVP
IEEE Standards include	IEEE 802.1p Traffic Prioritization IEEE 802.1Q Port Trunking IEEE 802.1d Spanning Tree IEEE 802.3 10 Mb/s Ethernet IEEE 802.3u 100 Base-T Ethernet IEEE 802.3x Full-Duplex Ethernet IEEE 802.3z 1000 Mb/s Ethernet

Capacity

	250,000 IP routes 4,096 VLANs 20,000 security/access control filters 250,000 IP routes 3-MB input/output buffering per Gigabit port 1-MB input/output buffering per 10/100 port
16-Slot	4,000,000 IP/IPX Layer 4 application flows 800,000 Layer 2 MAC addresses
8-Slot	2,000,000 IP/IPX Layer 4 application flows 400,000 Layer 2 MAC addresses

Maximum Number of Ports

16-Slot	120 Ethernet/Fast Ethernet ports, or 30 Gigabit Ethernet ports, 60 T1/E1 Ports, 30 HSSI Ports
8-slot	56 Ethernet/Fast Ethernet ports, or 14 Gigabit Ethernet ports, 28 T1/E1 Ports, 14 HSSI Ports

Performance

16-Slot	Full-function wire-speed IP/IPX routing 32 million packets-per-second routing throughput 30 Gb/s non-blocking switch fabric
8-Slot	Full-function wire-speed IP/IPX routing 15 million packets-per-second routing throughput 16 Gb/s non-blocking switch fabric

Hot-swap/Redundancy

Redundant switch fabrics (16 Slot only)
Redundant Switch Control Processors
Redundant power supplies
Hot-swappable linecards
Port Trunking

SPECIFICATIONS *(continued)*

Wire-Speed Capabilities

Layer 4 switching
Application-level Quality of Service
Layer 2 security filters
Layer 3/Layer 4 access control lists
IP/IPX routing
Multicast routing – DVMRP, PIM-DM, PIM-SM
RMON/RMON2

Operating Environment

Temperature 32° to 104°F/0° to 40°C
Relative Humidity 8 slot: 10% to 90%, non-condensing
16 slot: 5%

Power Requirements

100 to 125 VAC
200 to 240 VAC
Frequency Range: 50 to 60 Hz

Weight

16-slot 65 lbs/29.25 kg
8-slot 40 lbs/18.2 kg

Dimensions

16-slot (W x D x H) 17.25 x 12.25 x 40.64 in/43.82 x 31.12 x 40.64 cm
8-slot (W x D x H) 17.25 x 12.25 x 8.75 in/43.82 x 31.12 x 22.23 cm

Warranty

Hardware 12-Month Advanced Replacement and 90-Day Telephone support
Firmware 90-Day firmware support
Software: CNMS GIGAswitch/Router Manager 90-Day Telephone Support, conformance to Software Product Description (SPD) or user documentation

PART NUMBERS

Chassis

16-Slot GS/R includes chassis, backplane, fan and Switch Fabric.	3X-DGRCA-BA 117933-B21
8-Slot GS/R includes chassis, backplane, and fan.	3X-DGRCA-AA 117932-B21

Linecards

8-port 10/100 Base-TX 4 MB	3X-DGRCT-AA 117946-B21
8-port 100 Base-TX 16 MB	3X-DGRCT-AB 117943-B21
8-port 100 Base-FX 16 MB	3X-DGRCF-AB 117941-B21
2-port 1000 Base-SX 16 MB	3X-DGRCS-AB 117939-B21
2-port 1000 Base-LX 16 MB	3X-DGRCL-AB 117937-B21
1-port 1000 Base-LLX 70KM 16 MB	3X-DGRCG-AA 123149-B21
2-port HSSI	3X-DGRCH-AA 117942-B21
4-port Serial with Hardware Compression/Encryption	3X-DGRCK-AA 117949-001
4-port Serial with Hardware Compression	3X-DGRCK-AB 117950-B21

PART NUMBERS *(continued)*

Control Processor

Switch Control Process 64 MB	3X-DGRCC-BA 117935-B21
128-MB Memory Upgrade for SCP	3X-DGRCU-AA 117945-B21

Power Supplies

GS/R 8-Slot Chassis 120/240V Power Supply	3X-DGRCP-AA 117947-B21
GS/R 16-Slot Chassis 120/240V Power Supply	3X-DGRCP-AB 117948-B21

Firmware/Management Software

GIGAswitch/Router Services	OB-6DBAA-SA 152222-B21
GIGAswitch/Router Services Upgrade Kit	OB-6DBAA-MA 152223-B21

Power Cords

Power Cord – U.S., Canada, Puerto Rico, Mexico, Korea, Thailand	BNE4H-2E 113790-371
Power Cord – Hong Kong, Ireland, Singapore, UK	BN19A-2E 103541-031
Power Cord – Austria, Belgium, France, Germany, Finland, Norway, Sweden, Spain, Brazil, Chile	BN19C-2E 103541-021
Power Cord – Switzerland	BN19E-2E 103541-511
Power Cord – Australia, New Zealand	BN19H-2E 103541-011
Power Cord – Denmark	BN19K-2E 103541-481
Power Cord – Italy	BN19M-2E 103541-461
Power Cord – India, South Africa	BN19S-2E 103541-AR1
Power Cord – Japan (Dentori Approved)	BN46F-02

Options

Switch Fabric for 16 Slot	3X-DGRCD-AA 117951-B21
3-meter, 2-Lead Cable and two RS530 DTE (male) DB-25 25-pin Connectors	3X-BN43A-03 117953-B21
3-meter, 2 Lead Cable and two Male RS 449 DTE (male) DB-37 37-pin Connectors	3X-BN44A-03 117954-B21
3-mete, 2 Lead Cable and two Male X21 DTE (male) DB-15 15-pin Connector	3X-BN45A-03 117955-B21
3-meter HSSI Cable, Male-to-Male 50-pin Connector	3X-BN46A-03 123182-B21

RELATED PRODUCTS

GIGAswitch/Load Balancer

SW5450

SW5425

SW5422

SW5411

SW3324

SW3323

SW3322

MultiSwitch 700

MultiSwitch 900

GIGAswitch/FDDI

GIGAswitch/ATM

For more information on Compaq's full range of networking products, please contact your local Compaq Sales Representative or Authorized Compaq Reseller.

For additional information in North America, please call 1-800-344-4825.

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