QUICKSPECS

MODELS

Compaq SW5425 Desktop Gigabit Ethernet Switch

24 10/100Base-TX ports + one 1000Base-SX GBIC port
338376-B21

Compaq delivers Gigabit speed for desktop switching and high-performance workgroup applications with the Compaq SW5425

High Availability/High-Performance Switch

Several forces are driving the need for high speed LANs today - The growth of the Internet, re-centralization of corporate computing, and network-centric applications. Applications today such as transaction processing, voice, video, graphics, and Internet access are bandwidth consuming, server-oriented, and require higher speed networks. They demand high performance and ready availability for the desktop user.

The Compaq SW5425 Desktop Gigabit Ethernet Switch is poised to meet these demanding needs at the desktop with Gigabit switching capability. Users can employ the 24 10Base-T/100Base-TX ports that autosense for 10/100 Mbps operation and half- or full-duplex operation. The single Gigabit Ethernet port can accommodate high performance applications with fail-over achieved through the redundant port. The SW5425 switch is capable of non-blocking, line rate performance on all ports when configured as a Layer 2 switch or as a Layer 3 IP router.

EASE OF USE

Auto-negotiation

Each RJ-45 switched port on the Compaq SW5425 automatically senses if it is a 10 Mbps or a 100 Mbps network connection, thus allowing for seamless communication among the Ethernet family of protocols.

Hot-swappable Gigabit Interface Connector

The standard Gigabit Ethernet port, a hot-swappable 850nm 1000Base-SX GBIC module, can be replaced with a 1000Base-LX GBIC for networks spanning longer distances.

PERFORMANCE

More Power

A massive backplane provides more than enough raw bandwidth to support non-blocking operation. This means that all ports transmit and receive traffic at line rate (full-duplex operation) without over-subscribing the switch.

Dynamically assigned buffer memory (2 MB) ensures that even during peak traffic conditions no data is lost.

Load Sharing/Port Aggregation

The Compaq SW5425 can be configured to use a group of ports to carry traffic in parallel between switches. This creates higher throughput and resilience.

Quality of Service (QoS)

QoS dedicates bandwidth to traffic types, allowing network managers to shape network traffic and provide needed bandwidth to business-critical applications.

NETWORK MANAGEMENT

Compaq Networking Management Software (CNMS)

CNMS provides an intuitive graphical user interface making installation and monitoring of the Compaq SW5425 effortless.

Easy to use TELNET and Web-based management are provided for hands-on management and configuration. The Compaq SW5425 can be graphically managed under powerful management platforms such as HP OpenView, IBM NetView, SunNet Manager, and Novell ManageWise using WinManager, a product from Compaq partner Ordinox Networks.

Remote Monitoring (RMON) **Groups 1, 2, 3, 9**

The SW5425 supports four of the nine groups of remote monitoring — network traffic statistics, history, alarms, and events.

Virtual LANs (VLANs)

Setting up VLANs eases many time-consuming tasks of network administration while increasing efficiency in network operations. By tagging each frame with information about which virtual LAN it belongs to, users can be connected to any LAN segment regardless of their physical location. The SW5425 uses the IEEE 802.1Q draft standard and supports up to 256 VLANs. The switch also supports protocol and port based VLANs that are not covered in the standard

NETWORK MANAGEMENT *(continued)*

Port Mirroring

With this capability, the network manager can configure the switch to copy all traffic associated with one or more ports to a monitor port on the switch. The monitor port can be connected to a protocol analyzer or RMON probe for network traffic analysis and connection integrity.

SECURITY/RELIABILITY

Spanning Tree Protocol

The IEEE 802.1D spanning tree protocol provides fault tolerance by allowing the user to implement parallel paths for network traffic. Redundant paths are disabled when the main paths are operational and enabled if the main path fails.

Redundancy (Fault Tolerance)

One redundant Gigabit Ethernet port is included for fast failover for the active Gigabit port. If the active port fails or loses link status, the switch automatically activates the redundant port. An optional redundant power supply can also be purchased.

Routing Standards Compliance

SW5425 supports Open Shortest Path First (OSPF), Routing Information Protocol (RIP), and RIP v2, ensuring interoperability between other Compaq switches and legacy routers.

This allows network managers to build fault-tolerant meshed topologies that eliminate single points of failure and avoid network downtime.

Worldwide Leader in Total Cost of Ownership

Integrated management, guaranteed Ethernet and Fast Ethernet inter-operability, single source of support, and strong service and support options provide Compaq customers with a lower total cost of ownership (TCO), a higher level of network reliability, and greater confidence.

Designed with quality and long life in mind, the Compaq SW5425 meets all of Compaq's high design and manufacturing standards. Surface-mount technology, ASIC-based hardware, state-of-the-art manufacturing facilities, and top-notch quality inspection provide the reliability and quality expected from a Compaq product.

SPECIFICATIONS

10/100Base-TX ports	24
1000Base-SX ports	1
Redundant PHY port	1
GBIC modules	Yes
Auto-negotiate full-/half-duplex	Yes
Auto-negotiate 10/100Base-TX	Yes
Layer 2 MAC address support	32k
Layer 3 IP FDB	32k
QoS flows	32k
Internal switch fabric bandwidth	8.5 Gbps
Buffer memory	2 MB dynamic
Average gigabit latency	< 3 μS
L2 Aggregate Forwarding rate (64 byte frames)	5.1 Mpps
L3 Aggregate Forwarding rate (64 byte frames)	5.1 Mpps
Port trunking	2 or 4 port groups
Load sharing	Yes
802.1Q VLAN Tagging	Yes
802.1p Priority queuing	Yes

SPECIFICATIONS *(continued)*

VLANs	256 per switch
Layer 3 IP routing	Yes
Quality of Service	Yes
SNMP	Yes
RMON agent	Groups 1,2,3, 9
Web-based management	Yes
TELNET and VT-100 CLI	Yes
802.1D Spanning Tree	64 instances
Power On Self Test (POST)	Yes
Static FDB partitioning	Yes
Redundant power supply option	RPS 5400
DHCP/BOOTP relay	Yes
Distance Vector Multicast Routing Protocol (DVMRP)	Yes
Port mirroring	Yes
TCP/UDP port	Yes
Routing Information Protocol (RIP)	Yes
Open Shortest Path First (OSPF)	Yes
TELNET and VT-100 CLI	Yes
802.1d Spanning Tree	64 Instances
Regulatory Testing	
Emission	FCC p.15, Class A CSA C108.8-M11983 (A) EN55022 Class A VCCI Class A EN50082-1 to –4 (IEC 801) C-tick mark to AS/NZS 3548=1995 Class B
Safety	UL 1950, 3rd ed. CUL listed to CSA 22.2 #950 TUV GS mark EN 60950:1992/A3:1995 +ZB/ZC deviations Russian GOST safety approval

Supported Cabling

Standard	Type	Full Duplex	Half Duplex
10Base-T	Cat 3, 4, 5	100m	100m
100Base-TX	Category 5	100m	100m
1000Base-SX	62.5 micron MMF	260m	260m
	50 micron MMF	550m	260m
1000Base-LX	62.5 micron MMF	440m	320m
	50 micron MMF	550m	320m
	10 micron SMF	5000m	320m

Operating Environment

Temperature	32° to 104°F/0° to 40°C
Humidity	10% to 95% (non-condensing)
Altitude	0 to 15,000 ft / 0 to 3 km

SPECIFICATIONS *(continued)*

Storage Environment

Temperature	14° to 158°F/–10° to 70°C
Humidity	10% to 95% (non-condensing)
Altitude	0 to 35,000 ft/0 to 9 km

Predefined Protocol Filters

IP
IPX
NetBIOS
DECNet
IPX_8022
IPX_SNAP
AppleTalk

Kit Contents

24-port 10Base-T/100Base-TX
RJ-45 ports (MDI-X)
1 GBIC 1000Base-SX port
1 GBIC redundant port (not populated)
Power cord
Rack mount kit
Quick Reference Guide
CNMS/CIM CD ROM Users Guide

RFC Compliance

RFC 768	UDP
RFC 783	TFTP
RFC 791	IP
RFC 792	ICMP
RFC 793	TCP
RFC 826	ARP
RFC 854	TELNET
RFC 951/1542	BootP
RFC 1058	RIP
RFC 1112	IGMP
RFC 1122	Host requirements
RFC 1157	SNMP V1 v.2C
RFC 1213	MIB II
RFC 1256	Router discovery protocol
RFC 1354	IP forward table MIB
RFC 1493	Bridge MIB
RFC 1573	Evolution of interface
RFC 1723	RIP v2
RFC 1724	RIP v2 MIB
RFC 1757	RMON (1, 2, 3, 9)

SPECIFICATIONS *(continued)*

RFC Compliance *(continued)*

RFC 1812	IP router requirements
RFC 2021	RMON probe configuration
RFC 2037	Entity MIB
RFC 2068	HTTP
RFC 2131	BootP/DHCP relay
RFC 2178	OSPF
RFC 2236	IGMP v2
RFC 2239	MAU MIB
cpqn5400	Private enterprise MIB
DVMRP v3	
HTML, Telnet	Management
IEEE 802.1D	Bridging/spanning tree
IEEE 802.1D D17	GARP
IEEE 802.1D D11	GVRP
IEEE 802.1p	Priority queuing
IEEE 802.1Q	VLAN tagging
IEEE 802.3i	10Base-T
IEEE 802.3u	100Base-TX
IEEE 802.3X	Full-duplex/flow control
IEEE 802.3z	Gigabit Ethernet
RSVP	

Power Consumption

Power supply	110 to 220 VAC/50 to 60Hz
Power	118 Watts
Heat	341.2 BTU/hour

Weight

Unit	20 lbs/9.07 kg
Shipping	25 lbs/11.34 kg

Size

Unit (HxWxD)	3.5 x 17.32 x 17.32 in/8.89 x 43.99 x 43.99 cm 2 U (19 inch) rack mount

OPTIONS

1000Base-SX GBIC Module	338406-B21
1000Base-LX GBIC Module	338407-B21

RELATED PRODUCTS

5450 Desktop Gigabit Switch	338377-B21
5422 Gigabit Ethernet Switch US Model	338350-001
International Model	338350-B31
5411 Gigabit Ethernet Switch US Model	338400-001
International Model	338400-B31
5226A Ethernet Switch US Model	322900-001
International Model	322902-B31
5708TX Dual-Speed Ethernet Switch US Model	167050-001
International Model	167052-B31
SW3322 Dual-Speed Ethernet Switch	355300-B21
SW3323 Dual-Speed Ethernet Switch with 100Base-FX	355310-B21
SW3324 Dual-Speed Ethernet Switch with 100Base-FX	355320-B21

SERVICE AND SUPPORT OPTIONS[1]

3-Year Limited Warranty[1]	Included
Compaq Technical Support Center	Included
7 x 24 Telephone Support[1]	
PaqFax Facsimile Response System	Included
On-line Support	Included

[1] Certain restrictions and exclusions apply. For more information contact Compaq Networks Access Communications Sales at 1.800.544.4255, or the Compaq Server and Networking Technical Support Center (post sales) at 1.800.386.2172.