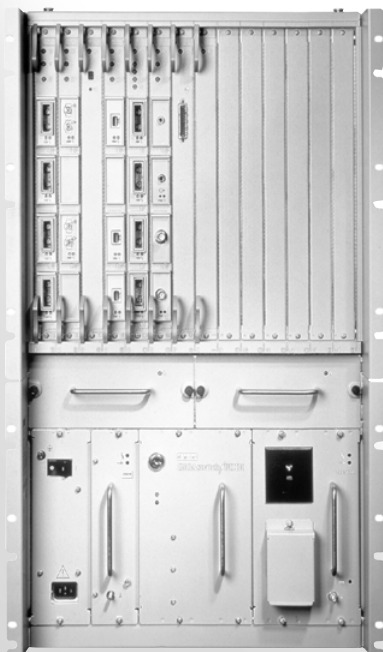


digital

## GIGAswitch/FDDI multitechnology switch

**Multilayer, multitechnology switching with the best price/performance in the industry**

Switch your straining backbone into high gear — with the award-winning DIGITAL GIGAswitch/FDDI™ system. This multilayer, multitechnology switch delivers industry-leading price/performance, nearly boundless scalability, and a price you can afford *today*. You also get exciting new capabilities such as IP packet switching, Fast Ethernet, and ATM/FDDI support. No wonder the GIGAswitch/FDDI remains the number one FDDI switch in the industry.



The GIGAswitch/FDDI system is the only FDDI switch that utilizes a crossbar switching fabric to handle the demands of multitechnology backbones, supporting FDDI, Fast Ethernet, and ATM technologies. Unlike software-based solutions, this awesome switch maintains high performance even under the heaviest loads. And the GIGAswitch/FDDI system always delivers higher throughput, lower latency, and more scalability than a collapsed backbone using routers.

Within the framework of the DIGITAL *enVISON™* architecture, the GIGAswitch/FDDI system makes it easy to integrate switching technology into your existing infrastructure by incorporating IP packet switching as part of a multitechnology solution. So you can enjoy the advantages of high-performance switching in your existing network — with a seamless growth path to incorporate additional technologies.

## Benefits

- Reduces bottlenecks for multi-technology backbones with support for full-duplex FDDI (FFDT), Fast Ethernet, and ATM
- Increases performance and reduces latency with optional IP packet switching, allowing more efficient use of routers for firewalls and WAN access
- Reduces the cost of entry for high-performance switching with affordable two-port or four-port packaged systems
- Protects investments with support for Fast Ethernet LANs and seamless growth from FDDI to multiple technologies
- Simplifies network management and minimizes total cost of ownership with graphical *clearVISN™* policy-based applications

## Switched FDDI for the highest performance in the industry

Get the performance boost your users need with the GIGAswitch/FDDI system from DIGITAL. This industry-leading FDDI switch was engineered from the ground up to be a backbone workhorse, supporting up to 34 switched FDDI LANs.

The GIGAswitch/FDDI delivers phenomenal performance — throughput of up to 6.25 million packets per second (pps) with average switch latency of 15 microseconds. That's much more than you can get out of a collapsed backbone using routers. And

thanks to FDDI Full Duplex Technology (FFDT) — a DIGITAL exclusive — you can achieve line speeds for point-to-point connections that potentially double the data transfer rate compared with standard FDDI.

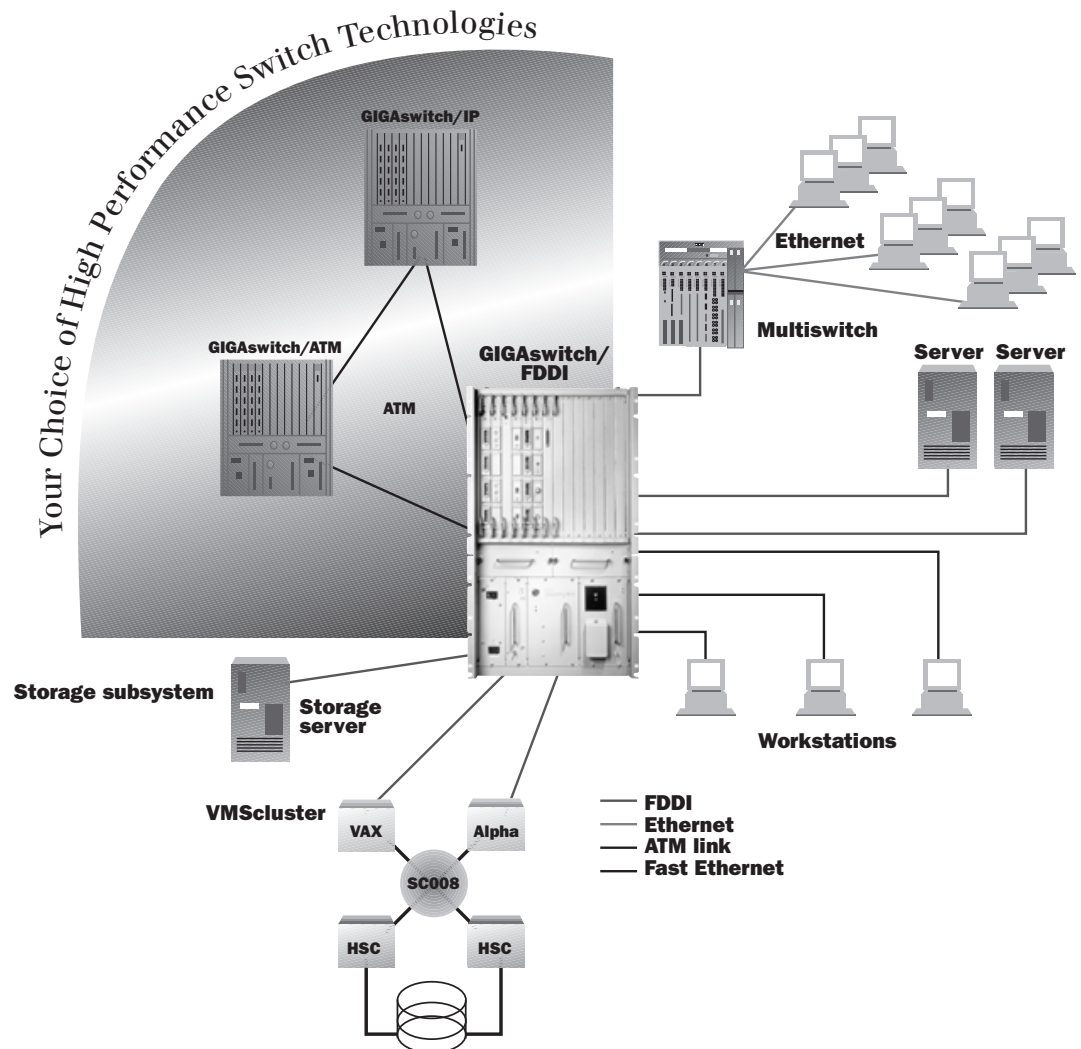
## IP Switching to improve performance and lower costs

The GIGAswitch/FDDI system includes IP packet switching, to achieve millions of packets-per-second between IP subnets. The system lowers costs, too, since you don't need expensive routers. And you have the flexibility to implement IP packet switching where and when you

need it to reduce bottlenecks. There's no need to worry about growth, either, since IP switching scales up to support 20,000 addresses — ideal for campus networks.

## Fast Ethernet line card enhances your investments

With the addition of a four-port Fast Ethernet linecard, the GIGAswitch/FDDI also gives you an easy, cost-effective way to connect Fast Ethernet LANs to an FDDI backbone — adding performance, while preserving investments. You get full-duplex Fast Ethernet performance and support for up to 34 Fast Ethernet ports.



### ATM/FDDI line card provides easy migration path

An optional 2-port ATM/FDDI linecard plugs into the GIGAswitch/FDDI system, giving you local or wide area ATM connectivity among FDDI and ATM systems. It supports up to 4,000 virtual circuits (VCs) and can be used in either the GIGAswitch/FDDI or the GIGAswitch/ATM for cost-effective migration and investment protection. FDDI stations and ATM stations can communicate using either ATM Forum LAN Emulation (LANE) or Classical IP.

### Extensive filtering

The GIGAswitch/FDDI includes a filter option to restrict traffic on a port-by-port basis based on address and/or protocol. It also supports up to eight learning domains and logical bridge domains with independent spanning trees. This capability allows you to segregate virtual LANs to optimize network performance and security.

### Easy to start, easy to grow

You can start off with an affordable two-port entry-level GIGAswitch/FDDI package and grow incrementally as needs change — up to 34 ports. Plus, by simply interchanging linecards, you can configure a mix of technologies including FDDI, Fast Ethernet, and ATM. With the addition of our hunt group feature, you can also configure multiple physical ports as a single logical port to gain an even higher rate of traffic flow between two GIGAswitch/FDDI systems.

# GIGAswitch/FDDI system — proven in real-world applications

For network backbones, workstation farms, high-performance workgroups, disaster recovery/remote backup, and more, the GIGAswitch/FDDI delivers the bandwidth you need, where you need it. And the multitechnology GIGAswitch/FDDI supports simpler, more flexible configurations that are not only easier to implement, but much less costly than a router solution.

### *For the Internet ...*

When you send e-mail or surf the Internet within the United States, chances are your message is being routed through a GIGAswitch/FDDI system. The DIGITAL GIGAswitch/FDDI system is used by major telecommunication companies in their metropolitan hubs, which carry the bulk of Internet traffic.

### *In health care ...*

A large U.S. pediatric medical center faced a variety of computing challenges. Using GIGAswitch/FDDI systems, the hospital is able to provide high-speed switching to accommodate growing network traffic and high-bandwidth applications such as imaging and distributed database functions.

### *In manufacturing ...*

An FDDI network from DIGITAL provides fine-tune control of operations at a large manufacturer in Australia, where it is used to simultaneously relay data from 480 separate smelting sites.

### GIGAswitch/FDDI features at-a-glance

<b>Number of ports</b>	34 FDDI ports, 22 ATM ports, 34 Fast Ethernet ports, or a combination of all three.
<b>Line speed</b>	100 Mb/s full duplex.
<b>Throughput</b>	Up to 3.4 Gb/s, providing up to 6.25 million connections per second.
<b>Latency</b>	15 microseconds of first-bit-in to first-bit-out latency.
<b>Linecard options</b>	2-port linecard supports either SAS devices (connected only to the primary FDDI ring) and/or DAS devices (connected to both the primary and secondary FDDI rings). 4-port linecard provides four SAS connections. Both linecards default to FDDI Full Duplex Technology (FFDT)
<b>Fast Ethernet support</b>	4-port Fast Ethernet linecard available supporting 100BaseTX or 100BaseFX connections.
<b>ATM support for wide-area connectivity</b>	2-port ATM linecard available supporting T3 or SONET connections among FDDI and ATM hosts.
<b>Hot-swap/redundancy</b>	Available for switch control processor, power supplies, linecards, and fans (dual, redundant fans are standard).
<b>Dual homing</b>	FDDI dual-homing is supported, enabling a standby path for workstations, servers, or other network devices.
<b>Filtering</b>	Restricts traffic based on source address, destination address, protocol type, or any combination on a per-port basis.
<b>Learning domains</b>	Enhances existing filtering with support for up to eight learning domains and spanning trees, allowing traffic on virtual LANs to be segregated.
<b>Compatibility</b>	Compatible with all ISO, ANSI, and IEEE FDDI standards for full interoperability with other vendors' standard FDDI equipment.
<b>Out-of-band management</b>	Menu driver/command line interface for easy entry-level management
<b>Hunt groups</b>	Allows two or more ports within a GIGAswitch/FDDI system to be configured as a single logical port.

## Features at-a-glance

## Built to perform, easy to manage

The GIGAswitch/FDDI is designed for the demands of the backbone. Hot-swap capabilities and optional redundancy are available for primary hardware components — and dual, mirrored GIGAswitch/FDDI systems can be configured for absolute fail-safe operation. This is a system built to support your most mission-critical applications, on-line transaction processing, or disaster-recovery schemes.

But don't be fooled by its rugged exterior. The GIGAswitch/FDDI system is easy to manage. Using DIGITAL *clearVISN* MultiChassis Manager, you can graphically configure ports and hunt groups, as well as manage adds, moves, or changes, and assign virtual work-groups — all from a single PC or UNIX® workstation. And our Save-and-Restore feature lets you capture the contents of a GIGAswitch/FDDI system's management memory to a file; then populate it to other systems in your network, saving you time and effort. DIGITAL makes it easy to visualize your network and then bring it to life through software.

## For More Information

For more information on the GIGAswitch/FDDI system and any of the full range of DIGITAL networking solutions, or for the name of the DIGITAL reseller nearest you, call 800-457-8211 in the United States only; worldwide, Fax +1 508-392-0605.

For additional GIGAswitch product information, reference the GIGAswitch/IP Solution product brief (part # EC-F7808-42), or the GIGAswitch/ATM family product brief (part # EC-F7806-42).

## Product specifications

### Physical

#### Dimensions

Height	89.5 cm (35.25 in) with plenums included
Width	48.30 cm (19 in) overall 44.45 cm (17.5 in) chassis only, without mounting flanges
Depth	50.8 cm (20 in)
Service space	91.4 cm (3 ft) in front
Weight	68.2 kg (150 lb) typical 90.9 kg (200 lb) maximum
Operating environment	Class B
Temperature	10°C to 40°C (50°F to 104°F)
Relative humidity	10% - 90% with maximum wet bulb temperature 28°C (82°F) and minimum dew point 2°C (36°F)

### Power requirements

AC power (single power supply)	95 - 240 VAC (15 A, 20 A) *
DC power	48 VDC option available

*\* Note: Absolute minimum operation is guaranteed down to the limits stated above for rated loads. Under some lighter loading configurations, the system may work down to 90 VAC for 120 VAC or 180 VAC for 240 VAC operation.*

### Hardware requirements

FDDI devices	Supports any ISO/ANSI standard-compliant FDDI device
Mounting	Fits into standard 19-inch rack
Cabling	FDDI Single-Mode Fiber (SMF), FDDI Multimode Fiber (MMF), and Category 5 Unshielded Twisted Pair (ANSI-TP) copper
Terminals	Requires ASCII terminal or RS-232 connection when using out-of-band console port

### Optional software

Management	<i>clearVISN</i> MultiChassis Manager V5.0, or any third-party SNMP-compliant application
Firmware/documentation	Upgrade service available



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