

DIGITAL MultiSwitch 700 10/100 Ethernet switching system

Optimized Ethernet switching for demanding departmental LANs

Get the most out of your Ethernet investments—with the DIGITAL MultiSwitch[™] 700 10/100 Mb/s departmental LAN switch. This high-performance switching system provides Ethernet/Fast Ethernet switching throughput of up to 10,000,000 packets per second. Plus, you get flexible, modular uplinks to FDDI, ATM, Fast Ethernet, Gigabit Ethernet backbones, and the WAN for costeffective integration to your entire enterprise network.



Benefits

Delivers high-performance Ethernet/Fast Ethernet switching performance for departmental LANs with flexible uplinks to FDDI, ATM, Fast Ethernet, Gigabit Ethernet and WAN connectivity

Maximizes productivity with throughput exceeding 10,000,000 packets per second (pps) with bandwidth exceeding 16.5 Gb/s Scales cost-effectively, supporting from 16 to 120 switched 10/100 Ethernet ports, 24 to 240 switched Ethernet ports, or a combination of both

Protects investments by enhancing performance on your existing Ethernet infrastructure

Optimizes performance with broadcast storm control, RMON, port mirroring, and port trunking

Performance and value in one powerful system

If you're looking for a high-density wiring closet solution, optimized for a 10/100 Mb/s Ethernet environment, then look no further than the MultiSwitch 700. Here's the perfect balance of performance, functionality, and value providing the enhanced capabilities you need today, with the flexibility to adapt to tomorrow's technology.

This standards-based system provides a high-speed, technology-independent switching backplane that delivers bandwidth of up to 16.5 Gb/s. Thanks to its distributed, modular architecture, switching performance scales as modules are added, with 10/100 Ethernet switching throughput over 10,000,000 pps. So you can satisfy even your most demanding power users. Yet, with its efficient design your cost per port remains among the lowest in the industry.

The MultiSwitch 700—a winning combination of performance and value.

Grow aggressively and safely

The modular design of the MultiSwitch 700 system lets you grow and adapt your network environment as your needs change, while ensuring reliable performance. First, it fits right into your existing Ethernet network by providing optimized 10/100 Mb/s switched Ethernet services. You simply choose the modules that fit your configuration requirements. A single MultiSwitch 700 chassis supports up to five interface modules, as well as two load- sharing, redundant power supplies.

All modules interface with a technology-independent backplane to allow for seamless connectivity within the chassis. The backplane is a non-blocking frame transfer matrix, and each interface module has a separate, independent backplane connection to every other module in the chassis. This allows for backplane bandwidth capacity in excess of 16.5 Gb/s. In addition, thanks to technology independence, this backplane can not only eliminate bottlenecks

using today's technology, but by simply adding modules, you can easily evolve the system to support higher speeds as your network demands increase.

Like other MultiSwitch systems, the backplane is a passive design, with all active components built into the interface modules. In fact, each module is equipped with its own ASIC-based switching engine, as well as an Intel™ i960 microprocessor for management. As a result of this distributed approach, adding more modules both increases aggregate system performance, and simultaneously increases fault tolerance. That way, you're safeguarded against the possibility of a backplane failure as you grow.

Extend your reach with built-in high-speed uplinks

While delivering high-density Ethernet switching for department LANs, the MultiSwitch[™] 700 also provides uplinks to Fast Ethernet, FDDI, ATM, and Gigabit Ethernet backbones, as well as to wide area networks (WANs).

Selected switching modules can be configured with Fast Ethernet uplinks, which allow Full Duplex Fast Ethernet connectivity to either local servers or the network backbone. Other switching modules accept optional high-speed uplinks for high-performance backbone connectivity to FDDI, ATM, Fast Ethernet, Gigabit Ethernet, or WAN environments.



MultiSwitch 700 – *a winnir*

Optimize performance with broadcast traffic control

Increased network performance also means increased exposure to broadcast storms. With the MultiSwitch 700, though, you can set broadcast traffic control limits to regulate the amount of broadcast traffic through the switch—isolating storms and maintaining optimal performance.

Thresholds are used to limit broadcast traffic, allowing multicast and unicast traffic to flow freely through the switch. You also have the control to limit broadcast traffic on a per-port basis to address known trouble spots.

Gain more bandwidth scalability with port trunking

Another key feature of the MultiSwitch 700 is its ability to use switched ports in unison, known as port trunking. This approach effectively connects devices across multiple switched ports, resulting in more available bandwidth for those applications that may otherwise tax individual interswitch links. This gives you tremendous flexibility to configure the switch to your exact requirements-right down to each user's specific bandwidth demands.

Eliminate downtime with detailed management

The MultiSwitch 700 has been designed with fully distributed switch engines within each module, enabling each engine to be managed as a single entity, while also enabling a single module to act as a proxy agent for the entire chassis.

The switch can be managed using local management tools or remote SNMP and RMON management stations. With SNMP, you have full remote management capabilities, enabling any SNMP-based network management platform to remotely monitor, control, and diagnose potential problems before they arise.

In addition, all nine groups of RMON are supported, so you can gain an in-depth management view for detailed traffic reporting and network utilization analysis. RMON provides you with essential information for capacity planning, performance optimization, and proactive problem resolution.

Out-of-band management is also provided through RS232 ports on each module using a standard VT220 terminal or emulator.

Enhance management with port mirroring

The MultiSwitch 700 also leverages your investments in external analyzers, RMON probes, and other management devices, by providing port mirroring. Port mirroring enables traffic on any given port to be mapped to a management device connected to another port, allowing network managers to keep better track of switch performance and make any changes or adjustments as needed. Port mirroring can be administered through remote or local management.

Switching modules for the MultiSwitch 700

The ASIC-based Ethernet MultiSwitch 700 modules allow for the configuration of a robust Ethernet wiring closet switching system capable of supporting up to 120 switched 10/100 Ethernet ports or up to 240 switched Ethernet ports in a single MultiSwitch 700 chassis. It is the ideal solution to flexibly and cost-effectively adapt your departmental LAN to changing needs.

10/100 Ethernet Solutions

MultiSwitch 700EX—24-port Fast Ethernet switch featuring RJ45 Full Duplex-capable auto-negotiating 10/100 Base-T ports. Also available as a 16-port module with one high-speed uplink slot.

10Base-T Solutions

MultiSwitch 700ET—48-port high-density Ethernet switch featuring RJ21 Full Duplexcapable 10Base-T switched ports and one optional highspeed uplink slot. Also available as a 24-port module with two Full Duplex 100 Mb/s Fast Ethernet uplink slots or one high-speed uplink slot.

MultiSwitch 700EE—24-port Ethernet switch featuring RJ45 Full Duplex-capable 10Base-T switched ports. Available with two Full Duplex 100 Mb/s Fast Ethernet uplink slots or one high-speed uplink slots.

MultiSwitch 700EL—24-port Ethernet switch featuring ST connections for multimode fiber and one optional highspeed uplink slot.

Carrier Module

MultiSwitch 700MD—Flexible Carrier Module offers an array of configuration options via two Fast Ethernet uplink slots and two high-speed uplink slots.

ng combination of performance and value.



Uplinks for MultiSwitch 700 switching modules

Fast Ethernet Connectivity

Designed to provide quick access to Fast Ethernet backbones and servers, two-port uplinks are available for Category 5 UTP, Singlemode Fiber, and/or Multimode Fiber (MMF) media, offering you the flexibility to address a range of Fast Ethernet connectivity requirements.

Gigabit Ethernet, FDDI, ATM, and WAN Connectivity

For high-speed backbone extensions to the MultiSwitch 700, high-speed uplinks are also available for selected switching modules, providing connectivity to Gigabit Ethernet, FDDI, ATM, or WAN environments. Flexible interface options attach to the uplinks supporting Singlemode Fiber (SMF), Multimode Fiber (MMF), or Category 5 UTP media. Next-generation Gigabit Ethernet connectivity is provided by either a single port interface, or a dual-port interface supporting one active and one redundant port.

The FDDI interface provides wire-speed translation through ANSI-compliant standards and can operate as a Single Attached Station (SAS) or Dual Attached Station (DAS).

ATM connectivity is provided by a redundant ATM interface. Fully ANSI compliant, this dual-port interface provides one primary connection and one standby connection that will automatically take over service should the primary path fail.

Two flexible WAN interfaces provide connectivity to a variety of wide area technologies including T1, E1, DDS, and serial lines.

Technical specifications		
Physical Specifications		
Interfaces	5 Slots for Independent Connectivity of	
	Host Modules	
In-band Management	Remotely via SNMP	
Out-of-band Management	RS-232 Console Port on each module	
Dimensions		
DLM6C-AA	24.5"H x 17.3"W x 14"D	
	(58.8cmH x 41.61cmW x 33.6cmD)	
HA205-AA	17.57"H x 2.38"W x 12.9"D	
	(42.17cmH x 5.71cn	nW x 30.96cmD)
H3105-AA	2.59"H x 17.18"W x 13.71"D	
	(6.21cmH x 41.23cn	nW x 32.9cmD)
Product Weight		
DLM6C-AA	22.5 lbs. (49.4 kg)	
HA205-AA	10.5 lbs. (23.1 kg)	
H3105-AA	3.5 lbs. (7.7 kg)	
Environmental Specification	5	
Operating Temperature	+5° to +40°C (41° to 104°F)	
Non-operating Temperature	-30° to +73°C (-22° to 164°F)	
Operating Humidity	15% to 90% (non-condensing)	
Power Consumption	Voltage Range 100-125 Vac	Frequency Range 50-60 Hz
	or	
	200-250 Vac	
Agency & Standards Specifications		
Safety	Meets the requirements of UL1950, CSA C22.2	
	No. 950, EN60950,	IEC950, and 72/73/EEC
Electromagnetic Compatibility	Compliant with the requirements of FCC Part 15,	
(EMC)	CSA C108.8, EN555022, VCCI V-3/93.01,	
	EN50082-1 and 89/	336/EEC
RFCs	IETF MIB II (RFC 1213), IETF Bridge MIB	
	(RFC 1286)	

For more information

For more information about the DIGITAL MultiSwitch 700 system and any of our full range of network products, call 800-344-4825 in the United States only; worldwide, Fax +1 978-392-0603.

Visit us on the World Wide Web:		
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