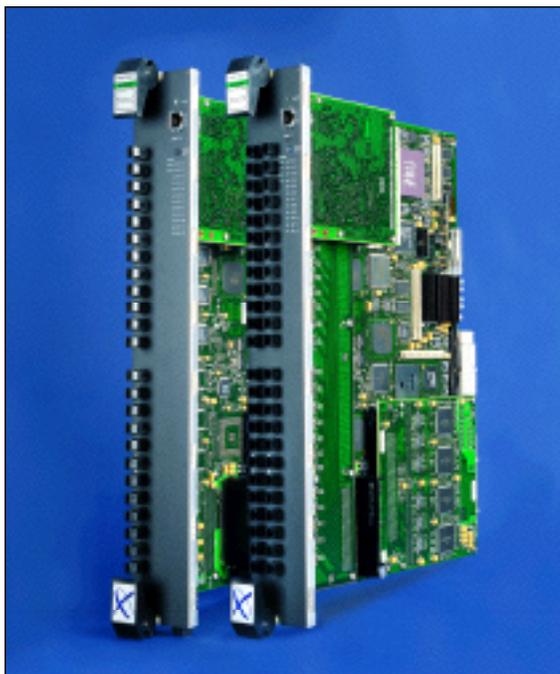


MATRIX™ 6H308-48 AND 6H308-24 HIGH-DENSITY 100BASE-FX SWITCHING MODULES

Data Sheet



- **Versatile switching for Internet data centers and high-performance wiring closets**
 - Module throughput of 3.6 Mpps and system throughput of more than 25 Mpps; 75% more throughput than previous generation module
 - Offers 48 MTRJ (6H308-48) and 24 MTRJ (6H308-24) 100Base-FX ports
- **Security, reliability and investment protection through fiber optic integration**
 - Fiber optic cable plants provide the most scalable infrastructure when compared to copper and wireless solutions
 - Inherent security can eliminate intrusion or outside RF concerns
 - Advanced security filtering based on Layer 2-4 information
- **Comprehensive traffic control at critical network access points**
 - Traffic regulation to and from servers and desktop users at network edge
 - Traffic shaping with per-port bandwidth provisioning and queue management, enabling service level agreements (SLAs)
- **High-availability features based on emerging industry standards**
 - Complies with IEEE 802.3ad Link Aggregation, IEEE 802.1s per-VLAN Spanning Tree and IEEE 802.1w Quick Convergence Spanning Tree
- **Multilayer frame classification delivers key functionality**
 - Provides Dynamic 802.1Q VLAN membership; Advanced Traffic Filtering
 - Secures MAC/IP addresses of vital network resources
 - Prioritizes voice or multicast traffic using 802.1p to deliver QoS capabilities
- **Intuitive, standards-based management for deployment and troubleshooting**
 - Provides SMON and full RMON 1; 802.1Q IETF MIB (RFC 2674)
 - GUI-based NetSight device and VLAN management applications

10/100 Ethernet Switching over Fiber for the Matrix E6 and E7

The Matrix 6H308-48 and 6H308-24 switching modules feature the security and reliability inherent in fiber, combined with the industry-leading features of Matrix modules.

High-Density Switching for Internet Data Centers and High-Performance Wiring Closets

The Matrix 6H308-24 and 6H308-48 high-density switching modules are Enterasys' third-generation 100Base-FX switching solutions for both the Matrix E6 and E7. The addition of 100Base-FX technology allows customers the ability to securely deploy fiber solutions to the desktop. Fiber connectivity is provided via industry-standard MTRJ connectors and both modules are capable of half and full duplex operation.

The 6H308-24 and 6H308-48 are capable of forwarding more than 3,600,000 packets per second (pps), for an aggregate Matrix E7 system performance of more than 25,000,000 pps.

The modules offer embedded Layer 2-4 services on advanced ASICs and bring comprehensive Quality of Service, security and traffic containment to desktops and servers at the network edge. Unlike traditional routed solutions that are both costly and complex, these high-density modules enable precision control to critical network entry areas. Network managers can guarantee delivery of high-priority applications, enable service level agreements (SLAs) by provisioning bandwidth, and prevent security breaches by stopping them at their source. These next-generation solutions also have the switching power and port density to satisfy even the largest enterprise network.

To meet the demand for network security, the 6H308-24 and 6H308-48 can be deployed using IP Access Control Lists, Radius Authentication, and SNMP Management VLANs. These comprehensive security features ensure that the switch is protected from intruder attacks. User-based security and authentication is also a key part of the feature set. The 6H308-24 and 6H308-48 deliver this functionality via port-based MAC address locking and support for the emerging 802.1X authentication standard.



TECHNICAL SPECIFICATIONS

Memory
Main Memory
20 MB

Buffer Memory
4 MB

FLASH Memory
8 MB (expandable to 16MB)

Address Table Size
16,000 entries

Module Performance
3,600,000 pps (measured in 64Byte packets)

Switching Fabric Capacity
6 Gbps

FTM I Backplane Speed
2.1 Gbps

MANAGEMENT OPTIONS

In-Band Management
Via SNMP using NetSight Element Manager

Out-of-Band Management
Via RS232 COM Port, Telnet
Embedded Webview, web-based management

System CPU LED Indicators

Red: Blinking—hardware failure has occurred
 Solid—resetting, normal power-up reset

Amber: Blinking—crippled
 Solid—testing

Green: Solid—functional

Amber/Green: Booting—blinks Amber and Green while booting

MTBF
6H308-24
220,759 hrs (predicted)

6H308-48
213,814 hrs (predicted)

Standards Support
IEEE 802.1Q, 802.1D, 802.1p, 802.3u, 802.3x, 802.3

IEEE 802.3u 100Base-FX Characteristics
412 meters at half duplex
2 Kilometers at full duplex

Fiber Type

50/125 μ m Fiber
6.0 dB (worst case)
9.0 dB (typical budget)

62.5/125 μ m Fiber
9.0 dB (worst case)
12.0 dB (typical budget)

100/140 μ m Fiber
15.0 dB (worst case)
18.0 dB (typical budget)

PHYSICAL SPECIFICATIONS

Interfaces
6H308-24
24 100Base-FX via MTRJ connectors

6H308-48
48 100Base-FX via MTRJ connectors

Dimensions
46.43 cm (18.28") H x 6.05 cm (2.38") W x 29.51 cm (11.62") D

Weight
2.04 kg (4.5 lbs)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature
5° to +40° C (41° to 104° F)
6H308-48 511 BTU, 143 ACVA
6H308-24 315 BTU, 94 ACVA

Non-Operating Temperature
-30° to +90° C (-22° to 194° F)

Operating Humidity
5% to 90% RH, non-condensing

Power Consumption
Voltage Range
100-125 VAC or 200-250 VAC
50-60 Hz

AGENCY AND STANDARDS SPECIFICATIONS

Safety
UL1950, CSA C22.2 No. 950, EN60950, IEC950, 72/73/EEC

Electromagnetic Compatibility
FCC Part 15, CSA C108.8, EN555022, VCCI V-3/93.01,
EN50082-1, 89/336/EEC

ORDERING INFORMATION

6H308-24
24 MTRJ 100Base-FX Ethernet Switch for the Matrix E6 and E7

6H308-48
48 MTRJ 100Base-FX Ethernet Switch for the Matrix E6 and E7

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