



- **Seamless multiple technology connectivity**
 - Supports two high-speed interface modules (HSIMs) and two Fast Ethernet port interface modules (FEPIMs), providing optional integrated connectivity for ATM, Gigabit Ethernet, FDDI, WAN and Fast Ethernet
 - ASIC-based design delivers over 400,000 packets per second of throughput for a single module, and over two million pps for the system
- **Standards based for complete system interoperability**
 - Support for the IEEE 802.1Q standard ensures multivendor VLAN interoperability
- **Fully fault tolerant for maximum availability**
 - Integrated modular design provides a single-box LAN/WAN switching solution, improving system fault tolerance
- **Industry-leading management**
 - GUI-based NetSight provides device and VLAN management
 - Full RMON support for the highest degree of network management
 - Port trunking and port mirroring capabilities simplify network management
 - Broadcast control services govern traffic flow to prevent storms and maintain optimal network performance

Flexible Connectivity for the Matrix

Preserve initial investments as you cost-effectively integrate new technologies with the Matrix 6M146-04.

Seamless LAN, WAN or ATM Technology Integration

The Matrix E6 (formerly SmartSwitch 6000) and Matrix E7, through a wide choice of economical modular interfaces, provide multiple technology and connectivity options that seamlessly combine to form a highly manageable, tightly integrated system. The advanced design of the Matrix 6M146-04 Carrier Module allows customers to integrate new technologies simply and cost-effectively into their existing network infrastructure while preserving their initial investment.

The Matrix 6M146-04 module offers a fully optional configuration, consisting of two high-speed interface modules (HSIMs) for connecting to ATM, Gigabit Ethernet, FDDI or WAN backbones, and two Fast Ethernet port interface modules (FEPIMs) for Fast Ethernet connectivity. This flexible, fully integrated solution performs inter-technology translational services through hardware-based ASICs, enhancing network performance and providing superior fault tolerance.

Designed to meet the connectivity needs of small, medium and large enterprises, the Matrix product family—including the industry-leading Matrix E6 and E7—provides high-density, scalable, multilayer switching to enable all the critical applications an organization needs to thrive in the Internet economy. This includes everything from e-commerce and enterprise resource planning to industry-specific applications such as telemedicine, distance learning, and secured financial transactions—even the day-to-day applications a company requires to do business. With the features customers are looking for—guaranteed QoS, enhanced security, multiple technology support, industry-standard management, and more—Enterasys switching solutions are building the next-generation IT infrastructure to support growing enterprises.

TECHNICAL SPECIFICATIONS

Processor

Intel i960 HT RISC Processor

Switching Engine

Custom ASIC

Main Memory

20 MB

Buffer Memory

4 MB

FLASH Memory

4 MB expandable to 8 MB

Address Table Size

8,192 entries

Performance Throughput Capacity

In excess of 400,000 pps (64 byte packets)

Switching Bandwidth Capacity

640 Mbps

PHYSICAL SPECIFICATIONS

6M146-04 Interfaces

Two high-speed interface module (HSIM) slots, and two Fast Ethernet port interface module (FEPIM) slots

Dimensions

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

Weight

1.8 kg (4 lbs)

MTBF (predicted)

> 200,000 hours

In-Band Management

Via SNMP using NetSight Element Manager

Out-of-Band Management

Via RS-232 com port

ENVIRONMENTAL SPECIFICATIONS

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 to 125 Vac or 200 to 250 Vac

Frequency Range: 50 to 60 Hz

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AGENCY AND STANDARDS SPECIFICATIONS

Safety

Meets the requirements of UL1950, CSA C22.2 No. 950, EN60950, IEC950 and 72/73/EEC

Electromagnetic Compatibility (EMC)

Compliant with the requirements of FCC Part 15, 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 1493), IETF RMON MIB (RFC 1757), FIB MIB (RFC 1354)

ORDERING INFORMATION

6M146-04

Matrix E6/E7 module with two HSIM slots and two FEPIM slots (purchase HSIMs and FEPIMs separately)

HSIM-F6

FDDI high-speed interface module, supports two FPIMs, both purchased separately

HSIM-FE6

Fast Ethernet high-speed interface module with two FEPIM slots (purchase FEPIMs separately)

HSIM-G01

Gigabit Ethernet high-speed interface module for any HSIM host system; single port support via P802.3z 1000BaseSX (Short-wave) MMF SC

HSIM-G09

Gigabit Ethernet high-speed interface module for any HSIM host system; single port support via P802.3z 1000BaseLX (Long-wave) MMF/SMF SC

HSIM-SSA710

T1 WAN dial access concentrator high-speed interface module, single ISDN T1/PRI interface (RJ-48C), supports optional 2nd T1/PRI interface

HSIM-SSR-600

HSIM-SSR-600 with dual SWPIM slots, 10/100 Ethernet, CRS

HSIM-W84

4-port WAN high-speed interface module supports four T1 interfaces via four RJ48C interfaces and IP/IPX routing

GPIM-01

Gigabit Ethernet port interface module, 1000Base-SX

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