MATRIX™ 6H202-24 AND 6H252-17 10/100 ETHERNET SWITCHING MODULES

Data Sheet

- **High-performance, scalable switching for the wiring closet**
  - Module throughput of 2 million pps and system throughput of 10 million pps
  - Module bandwidth of 3.3 Gbps and system bandwidth of 16.5 Gbps
  - Layer 3/4 Classification for VLANs, class of service/traffic prioritization, and flow control
  - Modular uplink (6H252-17) for flexible, high-speed access to Gigabit Ethernet, Fast Ethernet, ATM, WAN and FDDI
- **Fully fault tolerant to ensure maximum uptime**
  - Distributed switching architecture increases throughput and switching capacity with each additional module
  - Complete system redundancy offers management, switching, power supplies and environmental control
- **Standards based for total system interoperability**
  - Complies with industry standards, including 802.1Q VLAN standard, 802.3x flow control standard, and 802.1p class of service standard
- **Intuitive enterprise management**
  - GUI-based NetSight™ offers device and VLAN management
  - Provides full SNMP management and nine groups of RMON
  - Intelligent Broadcast Control suppresses broadcast packets according to a user-defined threshold, governing the flow of traffic to avoid storms

High-Performance Fast Ethernet for the Matrix

With the 6H202-24 and 6H252-17 modules, the Matrix E6 and E7 bring added features and functionality to the enterprise.

High-Density Switching for the Enterprise Wiring Closet

The Matrix 6H202-24 and 6H252-17 are high-performance 10/100 Fast Ethernet modules for the Matrix E6 (formerly SmartSwitch 6000) and Matrix E7 chassis. The 6H202-24 provides 24 10/100 Fast Ethernet ports via RJ45 interfaces making it ideal for wiring closet environments that demand high-density 10/100 Fast Ethernet switching. Typical applications include connections to any combination of the following three: end users, servers, and backbone devices. A Matrix E6 or E7 chassis fully configured with 6H202-24 modules yields 120 switched Fast Ethernet ports with an aggregate forwarding capacity of 10,000,000 packets per second.

Ideal for wiring closet environments requiring high-density 10/100 Ethernet connectivity and the added benefit of integrated connectivity to high-speed backbone technologies such as Gigabit Ethernet or ATM, the Matrix 6H252-17 provides 16 10/100 Fast Ethernet ports via RJ45 interfaces and one VHSIM slot.

When deployed together in the Matrix E6 or E7, the Matrix 6H202-24 provides a high density of 10/100 Fast Ethernet interfaces while the 6H252-17 provides flexible backbone connectivity for the chassis along with additional 10/100 interfaces. The VHSIM slot can be populated with a large variety of technologies including switched Gigabit Ethernet (1000Base-SX/LX/CX) using the VHSIM-G6, or ATM, FDDI, Fast Ethernet or WAN using an HSIM. The physical media type (MMF, SMF, etc.) within the VHSIM/HSIM is also user-configurable, according to type of port interface module (PIM) used. VHSIM slots accept VHSIMs and HSIMs, ensuring investment protection for uplink modules purchased in the past.

The high-performance ASICs, capable of switching packets at a rate of two million per second, are used on each individual module ensuring a high level of performance, even in high-density configurations. The 6H202-24 and 6H252-17 standard features include full duplex, 10/100 auto negotiation, and the full nine groups of RMON on every port.

ENTERASYS NETWORKS™

MATRIX

TECHNICAL SPECIFICATIONS

Management Processor
Intel i960® HD RISC Processor

Switching Engine
Custom ASIC

Main Memory
20 MB expandable to 32 MB

Buffer Memory
4 MB

Flash Memory
8 MB

Address Table Size
16,000 entries

Performance Throughput Capacity
2,000,000 pps (measured in 64 byte packets)

Switching Bandwidth Capacity
3.3 Gbps

In-Band Management
Supported

Out-of-Band Management
Via RS-232 COM Port, Telnet

PHYSICAL SPECIFICATIONS

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

Weight
1.62/1.67 kg (3.6 / 3.7 lbs)

MTBF
> 200,000 hr (predicted)

Technology
Fast Ethernet

Port Count
6H202-24: 24
6H252-17: 16

Media Type
UTP

Connector Type
RJ45

User Configurable Ports (VHSIM slots)
6H202-24: 0
6H252-17: 1
(VHSIM slot accepts HSIMs and VHSIMs)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature
+5° to +40°C (41° to 104°F)

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

Operating Humidity
5% to 90% (non-condensing)

Power Consumption
Voltage Range: 100 to 125 VAC or 200 to 250 VAC
Frequency Range: 50 to 60 Hz
Redundancy: Yes

ORDERING INFORMATION

6H202-24
High-performance 10/100 Fast Ethernet module for the Matrix E6 and E7 with 24 ports via RJ45 interfaces

6H252-17
High-performance 10/100 Fast Ethernet module for the Matrix E6 and E7 with 16 ports via RJ45 interfaces and one high-speed uplink slot (purchase VHSIM separately)

VHSIM-G6
Gigabit Ethernet VHSIM, connectivity provided via hot swappable GPIMs

HSIM- F6
FDDI high-speed interface module (supports two FPIMs, both purchased separately)

VHSIM2-A6DP
45Mbps - 622Mbps ATM VHSIM

HSIM-FE6
Fast Ethernet high-speed interface module with two FEPIM slots (purchase FEPIMs separately)

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 (GPIM), 1000BaseSX

Lit. #9012156-1 3/01

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