

MTX Series

High Capacity Matrix Switches MTX256

ENVIRONMENTS
ATM • LAN • SONET •
VIDEO • Frame Relay

APPLICATIONS
Cable Extension
Resource Sharing
Disaster Recovery
Cable Management
Remote Test/Monitor

Key Features

- PCU Distribution
- Integral SNMP proxy agent that operates under HP OpenView™ (UNIX or Windows), Netview™ 6000 or Sun NetManager™.
- Supports Standard and SuperPCU
- Hardware Setup and Control fully managed through CorScan.
- Supports Copper and Fiber Distribution
- Intelligent port card design. One Card many Functions.
- Intermix interface types/speeds in the same chassis.
- Complete Hardware Redundancy. Fault tolerant architecture with automatically switched redundant logic, power supplies, and dual power feeds.
- Extensive background diagnostics proactively monitor and verify the integrity of all data paths through the switch engine.
- Built-in Non-Volatile RAM retains connection table in the event of a power failure.
- Small footprint, high density design.
- Modular design and expansion to 4096 ports

For Space Efficiency, Nothing Beats the MTX256 Matrix Switch

In the MTX256, CORNET Technology, Inc. combines unparalleled interface and speed support with a space efficiency no other matrix switch system can rival. The MTX256 with its compact switching engine requires only one standard equipment rack to support 2048 ports. A fully expanded system occupies one half the engine space of a traditional matrix switch engine while supporting up to 4096 ports.

General Overview

The MTX Series of Matrix Switches brings the latest developments in switching technology to the CORNET line of switching products.

Based on a single-stage, non-blocked, crosspoint architecture the MTX256 provides the reliability, space efficiency, and fault tolerance required in today's fast paced workplace. The MTX matrix design enables it to switch virtually all of the available interfaces required for today's environment. These interfaces range from low speed VF to high speed digital and video applications.

Advanced 4th Generation Design

The MTX provides unparalleled versatility and flexibility. This 4th

generation crosspoint switch addresses all switching needs, Wide Area, LAN, and line management, within a single chassis. It is designed to switch most standard user interfaces.

Its modularity allows the MTX256 to intermix multiple interface types without the use of external port banks. The MTX256 supports both distributed PCU and direct termination.

The Ultimate in System Availability

System availability assurance is one of the MTX many design strengths. With the MTX there is no single point of failure. Redundancy is built into the switch's control, switch card, and power supply to ensure system reliability and fault tolerance. The MTX "no-hands" recovery approach automatically restores all system connections when power is returned to the switch. Redundancy extends even to the MTX system management system CorScan.

To keep system operators "up-to-date" on system health, the MTX provides automatic testing and alarm reporting. The switch's automatic fault recovery capability maintains system uptime in the event of a system crosspoint failure.

Control

CORNET's SNMP-based system management software, CorScan, offers the ultimate in system control. An intuitive, yet powerful, operator interface makes control a quick and precise process. CorScan allows distribution of clients throughout a network, providing responsive access to switch resources, regardless of location.

A Compact Design

The MTX Series of matrix switches is designed to allow maximum interface flexibility in a minimum amount of space. The matrix consists of two basic components, the switching cards and the interface cards. Each of these components is designed to maximize network uptime and reliability.

Depending on the interface type, each switch I/O card handles from two to 32 I/O ports. A single chassis holds up to 16 cards. Additionally, a 1024 configuration is supportable by stacking multiple chassis.

A Superior Matrix Engine

Fully configured with 16 switch cards, the feature-packed, MTX256 engine supports up to 1024 port connections. Two and four engines may be stacked to provide 2048 and 4096 port capacity.

A standard feature of the engine is its single crosspoint design. All MTX systems offer full switch card redundancy. Should a switch card fail, a standby switch card automatically assumes its duties. With the MTX, technicians have the ability to physically remove a switch card *without* losing a single connection. In short, the MTX provides both path *and* switch card redundancy.

Another feature of the MTX engine is built-in crosspoint testing that runs background checks on all matrix crosspoints. This feature enables an operator to precheck a connection before making the connection.

The MTX engine is managed by redundant controllers. In the event of a power failure, these controllers maintain a system connection table in the NV RAM. This connections table is used to automatically reconfigure the matrix when power is reasserted.

Integrated Service Tools

A full suite of service tools (Modem Eliminator, Breakout Box, BERT testing, and Interface Conversion) are included with the MTX. All integrated tools are accessible and manageable through CorScan by any operator with access privileges. Thus providing a convenient and predictable service platform regardless of operator location.

SPECIFICATIONS

Ports 4096 digital ports (1024 per chassis)

Cards 17 front mounted switching cards
16 rear mounted I/O cards
2 front mounted control processor cards
Two rear mounted control interface cards
17th card is a redundant switch card

Engine Footprint 2048 = 1 cabinet
4096 = 4 cabinets

Switch I/O Card

Interfaces

T1/E1 Up to 32 accepted.

Token Ring Standard 4 or 16 Mb. Up to 32 MAU or repeater ports can be configured.

Ethernet Up to 16 user ports per card. Up to 256 on a single matrix chassis. Configurable as either terminal or repeater. Collision detection supported.

Video Signals

Audio Input Level Range Active balanced, high impedance, +24 dBu
-7 to +24 dBu

ISDN S0 Up to 32 per card. Up to 512 on a single matrix chassis.

PCU Interface Support

RS-232 V.25 ISDN S0

RS-530 RS 449 T1/E1

Analog (VF) X.21

General

Power Output +5 VDC
Redundant Power Supplies Provided

Dimensions: 15.75"H x 19"W x 16"D

Weight: 35 lbs



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In the interest of continuous improvement, CORNET Technology, Inc. reserves the right to change specifications without prior notice.