

MTX Series

High Capacity Matrix Switches Model MTXL

Key Features

- WAN, LAN, and Line Switching in One Chassis
- Support of High Speed Interfaces (up to OC3 speeds)
- Integral SNMP proxy agent that operates under HP OpenView™ (UNIX or Windows), Netview™ 6000 or Sun NetManager™.
- Hardware Setup and Control fully managed through CorScan.
- 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 1024 ports



ENVIRONMENTS
ATM • LAN • SONET •
VIDEO • Frame Relay

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

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 MTXL provides the reliability, availability, and fault tolerance required in today's fast paced workplace. The MTXL's 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 MTXL 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 T1/E1, T3/DS3, OC3, SCSI, Token Ring, Ethernet, ISDN S0, and most standard user interfaces,

Its modularity allows the MTXL to intermix multiple interface types without the use of external port banks. The MTXL supports both distributed PCU and direct termination. High speed data interfaces are

connected directly on the rear of the matrix chassis (on the switch I/O card), greatly reducing the footprint of the matrix installation.

The Ultimate in System Availability

System availability assurance is one of the MTXL's many design strengths. With the MTXL 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 MTXL's "no-hands" recovery approach automatically restores all system connections when power is returned to the switch. Redundancy extends even to the MTXL's system management system CorScan.

To keep system operators "up-to-date" on system health, the MTXL 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 MTXL 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, MTXL engine supports up to 512 port connections. Two engines may be stacked to provide 1024 port capacity.

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

Another feature of the MTXL 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 MTXL 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.

Direct Chassis Interfaces

All available high speed interfaces for the MTXL connect directly to the matrix switch I/O card. Switch I/O cards are available for the T1/E1 interface, T3/DS3, Type II SCSI (10 Mbps), Token Ring, Ethernet, and the ISDN S0 interface. Changing interfaces is as simple as changing the switch I/O card. Interface cards can be mixed in the same matrix chassis.

Integrated Service Tools

A full suite of service tools (Modem Eliminator, Breakout Box, BERT testing, and Interface Conversion) are included with the MTXL. 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 1024 digital ports (512 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

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 499 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.