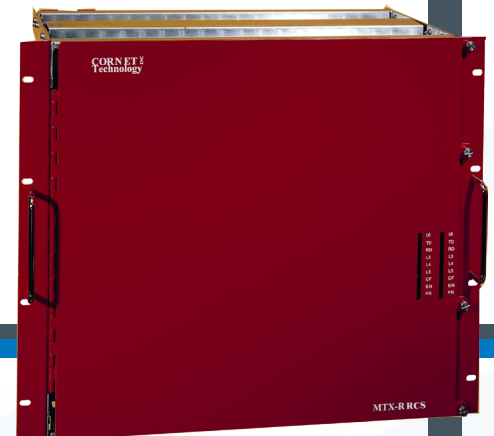


# CORNET SWITCHING SYSTEMS

## MTX-R RCS Conferencing Switch

### Automated Secure Voice Switching



The Cornet Switching Systems, Inc. MTX-R RCS is a non-blocking, high-speed digital conferencing switch ruggedized for military installation and application. This conference switch connects up to 352 dual-sourced ISDN telephones (32 PRIs) to 256 crypto devices. A conference call may include up to 63 parties on a single crypto device. Each switch will handle 256 simultaneous conference calls consisting of both ISDN digital telephones, analog telephones, and VoIP telephones.

#### System Description

The basic configuration the MTX-R RCS conference switch consists of an engine, redundant power supplies, fan panels, Port Concentrator Units (PCUs), and a control PC. The following telephones and devices are supported:

- CT-2100, CT2200, CT-2250 and CT-5200
- Programmable Integrated Communications Terminals (PICT) 7300 and 7500
- VUT ISDN telephones via Digital Private Branch Exchange (PBX)

Any connection made through the conference switch can be recorded using the Analog I/O card, the RED I2-Wire Analog PCU, and recording devices.

The switch design allows any available input (phone) to connect to any available output (crypto). Once a connection is made, it is made in full duplex mode,

telephone(s) to crypto and crypto to telephone(s). With the Intercom card installed, any ISDN telephone can call any other locally attached ISDN telephone through the switch.

Separate dual redundant power supplies power both the matrix engine and the PCU chassis. These power supplies include two independent power modules that mount in a single chassis. Each power module is capable of powering a single, fully loaded switch chassis. Both modules are configured in a load-sharing design that enables either power module to automatically assume the entire load if one module should fail.

#### Control

Control of the MTX-R RCS is via a Pentium PC running Cornet Switching Systems's CorScan® control software, a multiuser, client/server control system that allows up to 16 users to control the matrix from any location with access to the control network. With CorScan-400 the control network can be a private dial-in PPP configuration or the Internet. When the MTX-RCS is configured with the optional dual servers connected together via an Ethernet LAN, CorScan automatically updates the backup server after each command is issued or acted upon. In this manner, both Servers and both control card NVRAMs are continually updated with current connection information.

CorScan-400 is a Simple Network Management Protocol (SNMP) Agent and supports SNMP management. A proprietary Management Information Base (MIB) is available for control of the matrix. Standard SNMP managers such as HP OpenView and CastleRock PC may be used to control the Conference Switch.

For ease of maintenance all MTX-RCS cards are hot swappable allowing replacing or adding cards without first turning off the power.

## Key Features

- Non-Blocking Design
- Dual Terminal Control
- SNMP Control
- Dual Homing Capability
- Redundant Control Cards
- Battery-Backed Dual NVRAM
- Control Card Status LEDs
- Direct PRI input to switch
- Direct Analog I/O to crypto device
- Built-in Conference and Intercom capability
- Selectable Conference Member Limitation
- Built-in  $\mu$ -law CODEC
- ISDN and VoIP in the same chassis
- Full recording capability of all voice traffic
- Non-intrusive expansion capability
- Hot Swappable cards
- State-of-the-art surface mount technology
- Meets requirements of MIL-S-901
- Grade A for Shock and Vibration and MIL-STD-167-I
- IP Interface controlled with Session Initiative Protocol (SIP)

## Specifications

### Matrix General

Matrix Type:	Single Crosspoint, Electronic
Blocking Factor:	None
Broadcast Capability:	1 to All
Shock and vibration:	MIL-STD-901D Grade A, MIL-STD-167-I
Temperature:	Operating: 0°C to +50°C Non-Operating: -50°C to +100°C
Humidity:	98% RH non-condensing
Altitude:	Up to 3050m above sea level

### Power Requirements

Matrix Input Power:	1.5A @ +/-12VDC
PCU:	5.5A @ +5VDC
Fan Panel:	5A @ +12VDC
Power Supply:	350 Watt

### Physical Dimensions:

Engine Chassis:	19"W x 15.75" H x 20"D
Power Supply:	19"W x 5.25"H x 17.5"D
PCU:	19"W x 3.5"H x 13"D
Fan Panel:	19"W x 1.75"H x 16"D

### Weight:

Matrix Engine:	75 lbs
Fan Panel:	10 lbs
PCU:	20 lbs
Engine Power Supply:	30 lbs

### MTBF Figures:

#### Matrix Engine

Chassis:	25,589 Hours
Switch Card:	13,234 Hours
DS-1 Switch I/O Card:	6,522 Hours
Recorder Switch I/O:	15,184 Hours
Control Card:	13,608 Hours
Control I/O Card:	291,189 Hours

#### Power Supplies

Engine Power Supply:	100,000 Hours per module
PCU Power Supply:	100,000 Hours per module

UPS Ruggedized:	50,000 Hours
-----------------	--------------