

Nx8-MUX_DD

Dual Composite and
Dual Power Redundancy



FEATURES / BENEFITS

- ✓ Dual Composite Ports – Any channel may be assigned to one of two composites operating at the same rate. Dual links may be used for switch-on-fault or for aggregating bandwidth.
- ✓ Composite Port Interface – Each port software selectable for RS-232, RS-530, V.35, RS-422/449 or X.21
- ✓ Sub-Channel Interface(s) - 16 ports RS-232, four ports are software selectable for RS-232, RS-530, V.35, RS-422/449 or X.21
- ✓ Sub-Channels support Sync to 64Kbps and Async rates up to 38.4Kbps
- ✓ Composite Port speeds – 8Kbps up to 128Kbps in steps of 8Kbps.
- ✓ Independent sub-channel configuration with support for remote downlink loading
- ✓ Non-disruptive channel configuration
- ✓ Automatic cut-over of channels from failed to active composite port
- ✓ All configuration via terminal port
- ✓ In-Band Management Channel allows remote upgrades, configuration and status
- ✓ Modular design with front load cards
- ✓ Redundant power supplies

DESCRIPTION

The 16-Port Dual Nx8-MUX is a modular TDM Multiplexer designed to support up to sixteen sub-channel ports from 1200bps to 38.4 Kbps in Async format and up to 64Kbps in Sync formats.

The unit is designed with a pair of composite ports with variable port rate from 8Kbps to 128 Kbps in 8k steps for maximum flexibility. The composite port data interface is software selectable to operate as RS-232, RS-530, V.35, RS-422/449 or X.21.

The dual composite architecture allows for the distribution of channels over two aggregate links of equal bandwidth. This permits the utilization of the 2X bandwidth either to achieve up to nearly 256 Kbps total bandwidth, or to allocate spare bandwidth for channel recovery in the event either link fails. For the latter configurations, channels may be assigned either high or low priority, which assures that high priority channels remain in service on the surviving link.

The sub-channel ports may be individually configured to support flow control of RTS to DCD on a port by port basis or no flow control. The ports also support individual RTS to CTS delays and external TXC timing for DCE to DCE crossover. The data interfaces are RS-232 on 16 ports. In addition, four of the user ports are software selectable to operate as RS-232, RS-530, V.35, RS-422/449 or X.21.

The Dual Nx8-MUX derives its timing from the external DCE attached to the composite port. Alternately, timing may be sourced by the Nx8-MUX in a direct cabled pair of multiplexers. When using dual composites, timing may be independently selected for each link.

The Dual Nx8-MUX utilizes four, quad-port interface cards, a main processor card and dual redundant power supply modules. This modular design facilitates future upgrades and allows the user to add user ports in 4-port increments. All cards are front load.

The management port allows local and remote configuration commands. Integral software design features allow configuration of a sub-channel without disrupting existing sub-channels. Network management features include channel and composite loop backs, and link down error reporting. All port parameters are set with an async terminal connected to the configuration port. Setup procedures are menu driven and all parameters are stored in memory that supports power outages.

The Dual Nx8-MUX has an internal power supply and operates from voltages of 85-264 VAC. The unit has redundant power supplies with system notification. The unit is 5-U high and is standalone or 19" rackmount. The factory warranty is 3 years.

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SPECIFICATIONS

Application

Multiple Sync or Async DTE devices time division multiplexed onto one or two Sync DCE communication links

Timing

System Timing: External via Composite Port or Internal Timing for back-to-back connections
Each sub-channel Port capable of accepting external TXC timing for DCE to DCE crossover

Capacity

Composite Port: One or two Ports
Sub-Channel Ports: Up to sixteen

Data Format

Data transparent at all data rates

Data Rates

Composite Ports: 8kbps to 128Kbps in 8k steps

Sub-Channel Ports: SYNC: (Full Rates) 1.2k, 2.4k, 4.8k, 9.6k, 19.2k, 38.4k, 48k, 64k (3/4 Rates)
7.2k, 14.4k, 28.8k ASYNC: (Full Rates) 1.2k, 2.4k, 4.8k, 9.6k, 19.2k, 38.4k (3/4 Rates) 7.2k, 14.4k, 28.8k Async Support: configurable for 8, 9, 10 and 11 bit data on a per channel basis data on a per channel basis

Composite Port Interface

Two Ports: DB-25 Male, Software selectable for RS-232, RS-530, *V.35, *RS-422/449 and *X.21
*(Adapter cable required)

4 Port Sub-Channel I/O Card(s)

Four Ports: DB-25 Females, Four ports RS-232, one port Software Selectable for RS-232, RS-530, V.35, RS-422/449 and X.21 Maximum 4 cards per chassis, 16 I/O's per chassis

Control Leads Passed

Options for none or RTS to DCD in Band

Maximum Channel Composite Rate

128Kbps with composite overhead of 1600 bps.
Overhead is constant for all composite port rates.

Cascade Port

Via any sub-channel port

Indicators

Power, TX Data, RX Data, TX Clock, RX Clock, Sync, Loopback

Power Source

85-264 VAC @ 10%, 47-440 Hz, IEC Power Inlet, (2) 5mm Fuses

Environmental

Operating Temperature....32° to 122° F (0° to 50° C)
Relative Humidity.....5 to 95% Non-Condensing
Altitude.....0 to 10,000 feet

Dimensions

Height 8.72 inches (22.10 cm)
Width 17.00 inches (43.18 cm)
Length 9.00 inches (22.86 cm)

Weight

9 pounds (4.2 Kg)

Warranty

Three Years, Return To Factory

ORDERING INFORMATION

Part Number: 166100
Model: Nx-MUX_DD
Description: Dual Composite, Dual Power Chassis
QTY Req: 1

Part Number: 166106
Model: Nx8-MUX_DD to 128Kbps
Desc: Nx-8 Dual Composite Processor Card
Qty Req: 1

Part Number: 166007
Model: Nx8-I/O
Desc: I/O Board, 4-Port, Nx-MUX
QTY Req.: 1 to 4 Max

Part Number: 166080
Model: Nx-SRPS
Description: Nx-MUX, Single Redundant Power Supply
QTY Req: 1 or 2

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