# MX2820

## High Density M13 Multiplexer

## Product Features

- Affordable DS3 bandwidth consolidation
- Provides up to 9 redundant M13s in 2 RU of space
- Built-in 1:1 DS3 and DS1 redundancy
- System Controller Unit for centralized management
- Single IP address per shelf
- Capable of backhauling multiple service types (T1/E1)
- TL1, SNMP, and Telnet management
- Local and network timing
- Uses local powered –48 VDC
- Allows for up to 63 M13s to be mounted in a 7-foot bay
- 19-inch or 23-inch versions available
- Industry-leading 10-year warranty

**The ADTRAN™ MX2820 High-Density M13 Multiplexer offers bandwidth consolidation at a low price in a dense rackmount chassis.** The MX2820 gives customers the ability to easily install M13s on an as needed basis by simply inserting more MUX cards.

In areas where multiple M13s are needed, the MX2820 frees up valuable rack space with a high-density chassis. The MX2820 houses up to 18 multiplexer cards to provide 9 redundant M13 multiplexers in 2 rack units of space. Up to 7 redundant M13 multiplexers can be based in a 19-inch chassis. In addition, the MX2820 can provide up to 63 M13s in a 7-foot bay.

The MX2820 MUX cards are capable of combining independent T1s, E1s, or T1s and E1s on the same DS3. Each pair of MUX cards provides built-in 1:1 redundancy on the DS1 and DS3 signals. Advanced diagnostics include CSU loopbacks, NIU loopbacks, C-bit loopbacks, and built-in BERT (Bit Error Rate Testing) capabilities.

As with all ADTRAN products, the MX2820 offers comprehensive management options. It features a VT100 terminal interface for local configuration. To support SNMP and Telnet management, the MX2820 has an integrated 10/100BaseT port. TL1 alarming and editing can be accessed via the 10/100BaseT port, or the X.25 connection.

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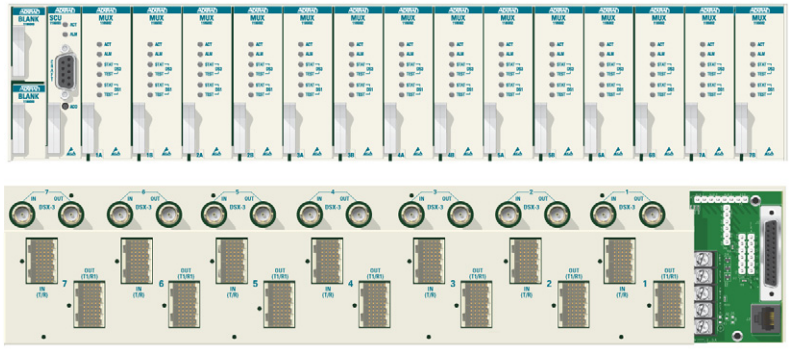

# Product Specifications

## Front Panel Features

### SCU

- **PWR:** Power
- **ACT:** Active or standby
- **ALM:** Alarm
- **ACO Button:** Alarm cutoff

### MUX

- **ACT:** Active or standby
- **ALM:** Alarm
- **DS3:** DS3 status indicator and DS3 test indicator
- **DS1:** DS1 status indicator and DS1 test indicator

## Mechanical

- **Dimensions:** 3.5 in. H X 17 in. W X 12 in. D (19" chassis)
  3.5 in. H X 21 in. W X 12 in. D (23" chassis)
- **Weight:** 5 pounds (without modules)

## Interfaces

- DS3 Level signals with standard 75 ohm BNC connectors
- DSX-1 Level signals with standard 60-pin Metral® connectors

## Clocking

- Network
- Local

## Alarms

- External alarm inputs for Critical, Major, and Minor alarms
- Normally open and normally closed pinout
- Front panel alarm cutoff switch (ACO)

## Electrical

- **Power Requirements:** –48 VDC, 15.5 W per redundant M13

## Regulatory Standards

- NEBS Level 3
- UL and CUL

## Management

- **VT100 Terminal Interface:** DB-9 interface
- **SNMP/Telnet:** Integrated 10/100BaseT Ethernet
- **TL1:** Alarming, via Ethernet or X.25 connection

## Environmental

- **Operating:** –40°C to +50°C
- **Storage:** –40°C to +85°C
- **Relative Humidity:** Per GR-63

# Ordering Information

| Equipment | Part # |
|---|---|
| MX2820 19" Chassis | 1186001L1 |
| MX2820 23" Chassis | 1186001L2 |
| MX2820 MUX Card | 1186002L1 |
| MX2820 SCU | 1186003L1 |
| 1U Heat Baffle | 1180002L1 |
| DS1 Connector to AMP Adapter Cable (3 ft.) | 1186020L1 |
| DS1 Connector to Stub Cable (25 ft.) | 1186025L1 |
| DS1 Connector to Stub Cable (50 ft.) | 1186050L1 |
| DS1 Connector to Stub Cable (100 ft.) | 1186100L1 |


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I.S. EN ISO 9001
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TL 9000
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Printed in the USA
6118600XL1-8A February 2003


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