

Mini-Mux™ 155

Drop 3 STS-1s, T3s, or AU3s from an OC-3/STM-1 in a one mounting space shelf.



Charles Industries' Mini-Mux™ 155 Optical Multiplexer offers advanced OC-3/STM-1 multiplexing features in the industry's most compact architecture. Programming options allow you to drop 3 STS-1, T3, or AU3 signals from either OC-3 or STM-1, thus providing tremendous flexibility in a 19" chassis only 1RU tall. Like all Charles Industries broadband

multiplexers, the Mini-Mux 155's very low power consumption and small footprint make it ideal for use in any location. Full redundancy for both the optics and drop ports provide high reliability and simple maintenance. Multiplexing SONET or SDH bandwidth to your network is now both easy to install and maintain.

Features

- OC-3/STM-1 Multiplexer for Feeder or Add/Drop applications
- Operates in Terminal Mode (APS) or Add/Drop mode (UPSR)
- Programmable high-speed ports (OC-3 or STM-1)
- Programmable low-speed ports (DS3, STS-1 or AU3)
- Accommodates channelized or unchannelized DS3 signals
- 19" shelf is only one rack unit (1RU) high
- 21 Watts max power dissipation, with redundancy. No fans required
- Terminal, Telnet, SNMP, TL-1, and Web management
- Remotely manageable over SONET DCC
- Completely Downloadable Software
- Extends M13 Muxes to 3X capacity

Applications

- DS3 drop-off from a SONET network
- STS-1 or T3 access to next-generation switches
- DS3 range extension over fiber
- Consolidating T3s/STS-1s
- Feeder/subtending SONET rings
- Intercarrier handoffs



Specifications

OC-3/STM-1 INTERFACE

Line Rate: 155.52 Mbps +/- 20ppm
Output Power: -8 dbm to -14 dbm
Input Sensitivity: -34 dbm
Optical Connector: LC
Optical Cable: Single-mode or multi-mode,
1310 nm or 1550 nm

T3 INTERFACE

Line Rate: 44.736 Mbps +/- 20ppm
Line Format: Bipolar B3ZS encoded
Framing: C-Bit Parity or M13
Line Build-Out: 0-900 feet of cable
Input Level: 35mV to 900mV
Clocking: Loop or Internal Timed

STS-1/AU3 INTERFACE

Line Rate: 51.84 Mbps +/- 20ppm
Line Format: Bipolar B3ZS encoded
Line Build-Out: 0-900 feet of cable
Input Level: 35mV to 900mV
Clocking: Loop or Internal Timed

MECHANICAL

19" Shelf: 1.75" (4.45 cm.) high,
17.37" (44.12 cm.) wide,
10.03" (25.49 cm.) deep
Weight: Maximum of 10 lbs.
(fully loaded and redundant)

ENVIRONMENTAL

- Ambient operating temperature from -5° to +55° C
- Relative humidity to 95% (non-condensing)
- Altitude to 12,000 ft. (3660 m)

ALARMS

- External contacts for visual and audible alarms
- Major and Minor Alarms
- Normally open and normally closed pin-out
- Front panel alarm cutoff switch
- OC-3 Input Alarms:
LOS, LOF, AIS, RDI
- STS-1 Input Alarms:
LOS, LOF, LOP, SLM, AIS, RDI
- T3 Input Alarms:
LOS, OOF, AIS, RAI

PERFORMANCE MONITORING

Cumulative Errored and Severely Errored Seconds:

- OC-3/STM-1 Section B1 errors
- OC-3/STM-1 Line B2 errors
- STS-1 B2 Line errors (drop side)
- T3 Parity errors

POWER

- Separate A & B battery feeds
- -48VDC or +24VDC, 21 watts maximum

SYSTEM MANAGEMENT

- VT100 terminal compatibility
- Telnet
- SNMP (Fully-compliant Charles Industries MIB)
- Web interface
- TL-1 interface
- Serial interface, 1200 baud to 115 kilobaud
- Ethernet 10BaseT, RJ45 Connector

CERTIFICATIONS

- UL/C-UL
- NEBS Level 3
- FCC Part 15 Class A



CUSTOMER SATISFACTION
CONTINUOUS IMPROVEMENT


With Charles, You Can Depend On:

- Field-proven and unequalled 24-hour technical support
- Individualized application consultation
- Training courses available

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