

Overview

The TM2 fiber optic multiplexer is designed to transmit up to two (2) T1 (DSX-1) or two (2) E1 (G.703) or two (2) V.35 Nx64 circuits via one single mode fiber optic cable. With an embedded micro-controller, each channel of the TM2 can easily be configured and monitored through the Network Management Software (NMS). Configuration control includes LBO Settings, Line Code Selection, and AIS Enabling.

The standalone TM2 front panel provides LED status indicators, including local and remote alarms, audio disable push button controls, and NMS ports. The rear panel provides AC/DC power input, E1/T1 or V.35 Nx64 channel modules, fiber optic connection, and relay contacts.

The rack mount TM2 module is a 3 RU plug-in card of the VK2300 chassis system. The VK2300 chassis system can accommodate up to ten (10) TM2 modules, up to two (2) AC/DC power supply modules and one (1) NMS module. The NMS module provides PC connection via RS-232 interface, SNMP interface via 10Base Ethernet connection (option) and DELMONS test ability (option). The front panel provides power and link LED indicators, E1/T1 connections and fiber optic connection.

The management port provides complete system function access with a graphical user interface menu for channel configuration, test, alarm reporting, and status display. System performance monitoring including code violation per each individual data channel, and the system optical composite signal. In addition, the TM2 's internal memory provides and updates historical data performance for every 15 minutes, 24 hours and 7 days intervals.

The TM2 is ideal for implementing simple trunking systems for premise, metropolitan, and industrial environments. Applications for the TM2 include PCS trunking, SCADA, ITS, railway networks, electrical utility networks, and cellular networks.



Features

- ◆ 2 Channel Multiplexer
- ◆ T1/E1 and CSU/DSU E1_Nx64_V.35 Interfaces Comply with ITU G.703 and G.823
- ◆ One Fiber Single-mode Optic Transmission
- ◆ Distance up to 50 Km
- ◆ Local and Remote monitoring. Audio Alarm
- ◆ Redundant Power Supply
- ◆ NMS (GUI) Monitoring Package. TCP/IP, SNMP Option
- ◆ Rack mount Card or Standalone
- ◆ Meet FCC Part 15 Class A

Applications

- ◆ Local Exchange Digital Service
- ◆ PCS Trunking
- ◆ Fractional T1/E1 Campus Networks
- ◆ Teleconferencing
- ◆ T1/E1 splitting
- ◆ SCADA Networks
- ◆ Traffic Networks
- ◆ Corporate and Enterprise Networks

Ordering Information

Model

TM2RFC53
VK2300
VK2300PSAC
VK2305NMSPC
TM2FC35
TM2NFC35

Description

Fiber Optic 2 Channel T1/E1 Mux Module, 1 Fiber SM, FC/PC
19" 3 RU chassis system
90-240 VAC Power Supply Module for VK2300 Chassis
Network Management Module w/ RS-232 Interface
Fiber Optic 2 Channel T1/E1 Mux, Standalone, 1 Fiber, SM, FC/PC
Fiber Optic 2 Channel V.35 Nx64 Mux, Standalone, 1 Fiber, SM, FC/PC

** Please consult factory for additional models and specifications*

System:

Error Rate	1 in 10 ¹⁰
NMS Display	GUI,
TCP/IP, SNMP	Option
NMS Connector	RJ12
Diagnostics	Local and Remote
Data Performance	Loopback
	Code Violation (CV)
	Error Second (ES)
Historical data storage	Several Error Second (SES)
	15 Min, 24 Hrs, 7 Days
Status Monitoring	Power, Links, Local and Remote Test, Alarms
Alarms	Major Alarm, Audio Alarm, ACO, Relay Contacts

Environment:

Operating	0 ⁰ C to 60 ⁰ C
Storage	-40 ⁰ C to 95 ⁰ C
Humidity	95% Non-Condensing

Power:

AC	90-240 VAC, 47-63 Hz
DC	-48 VDC (Optional)
Volts/Amp	5 VDC @ 4 Amp

Optical:

Coding Format	4B5B
Speed	80 Mbps
Transmitter	Laser
Receiver	PIN
Wavelength	1310/1550 nm
Power Budget	25 dBm SM Laser 30 dBm
Connectors	ST,SC, FC/PC
Fiber	One

Channel:

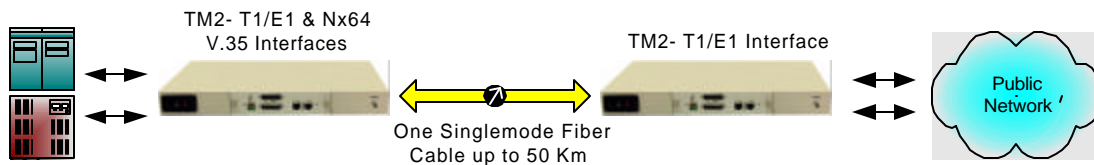
Line Code	2
	T1 - B8ZS/AMI E1 - HDB3/AMI
Data Rate	T1 - 1.544 Mbps +/- 50 ppm E1 - 2.048 Mbps +/- 50 ppm
Impedance	120 Ohms
Connector	RJ45
V.35 Interface	RS-530
Nx64	1 - 31
Connector	DB25

Physical:

Dimensions	19" x 1.75" x 10"
Standalone	
Rack Mount Module	19" x 5.25" x 10"

Example Applications

Point-To-Point Configuration:



Star Configuration:

