

Overview

Vilink ITS equipment: The VK25 is an extremely reliable low cost point to point one fiber optic synchronous data modem. It is designed to link a remote terminal to the host computer via one or two single mode optical fibers. Users may plug the VK25 modem directly into any EIA-RS422 interface. Application options provide the flexibility to meet many requirements, supporting single mode fiber and all major connection types.

The VK25 multiplexer can transfer asynchronous data up to 5 Mbps with RS-422 (RS-530) interface. It provides a DCD signal when the receiver has received a data signal from the far end while the RTS and DTR control signals are internally loop backed for handshaking applications. Transmission distances can be used up to 50 Km with one single mode fiber optic cable.

The VK25 is designed for any general purpose application between data communication equipment. Typical applications include remote terminal to host computer connections, tail circuits to multiplexers, monitoring equipment to a central control system, and situations requiring extended distances. It may also be used in harsh environments because fiber optic cable is virtually impossible to tap without detection.

The VK25 rack module series may be further maintained with the optional VILINK Plus+ (NMS) Network Management & (GUI) Interface Software Package in the universal VK2300 chassis. This permits any users the ability of monitoring the entire system for status alarms, such as loss of signal or optical signal, on any one of the system channels.

Applications for the VK25 Series include campus fiber Traffic Control System, Metro Operation System, SCADA systems, Campus Networks and military applications.



Features

- EIA RS-422 Interface
- Synchronous Data Modem
- Speed Up To 5 Mbps
- One or Two Fibers
- Distances Up To 40 Km
- AGC Receivers
- Extend Temperature NEMA Range
- Rack card with NMS Option

Applications

- ITS Traffic Applications
- SCADA Networks
- Metro Networks
- Gas & Oil Fields Monitoring Applications
- Railroad Networks
- Military Applications
- Data Acquisition Applications

Order Information

Model	Descriptions
VK25ST03	Fiber Optic Synchronous Data Modem, 1310nm SM ST 50Km, +12 VDC
VK23RST03	Fiber Optic Synchronous Data Modem Rack Card Master Unit, 1310nm SM ST 50Km

Specifications

System:

Error Rate	1 in 10 ¹² or Better
Protocol	Synchronous Data
Indicators	PWR, TXD, RXD
NMS (Option)	VK2300 Chassis

Environment:

Operating	-34 ^o C to +74 ^o C
Storage	-40 ^o C to + 95 ^o C
Humidity	98% Non-Condensing

Physical:

Standalone	6" x 4" x 1.25"
Rack Card	1" x 4.5" x 10"

Power:

Standalone	+12 VDC @100mA
VK2300 Chassis	90~240 VAC 47~63 Hz

Optical Ports:

Transmitter	Lasers
Output Power	-3 dBm min @single mode
Receiver	PIN-TIA
Sensitivity	-32 dBm with AGC
Wavelength	1310nm SM (Nominal) 850nm MM (short Distance) 1550nm SM (Long Distance)
Connectors	ST, FC and SC

Data Port:

Channel	1
Interface	RS-422
Data Format	Synchronous
Data Rate	DC to 5 Mbps
Connector	Female DB-25

Application

