



Vi-Link

Fiber Optic Communications

Fiber Optic Modem Asynchronous RS-232/422 Data with Selectable Switch

Datacom Equipment Series

Model VK23



Product Description

Vilink ITS equipment: The VK23 is an extremely reliable low cost point to point one channel fiber optic 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 VK23 modem directly into any selectable EIA-RS232 or EIA-RS422/485 interface. Application options provide the flexibility to meet many requirements, supporting single mode fiber and all major connection types.

The VK23 multiplexer can transfer asynchronous data up to 112 Kbps with RS-232 or RS-422/485 interfaces. 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 40 Km with one single mode fiber optic cable.

The VK23 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 VK23 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 VK23 Series include campus fiber Traffic Control System, Metro Operation System, SCADA systems, Campus Networks and military applications.

Features

- Selectable RS-232 or RS-422/RS-485 Interfaces
- Asynchronous Data Speed Up To 112 Kbps
- One or Two Fibers
- Distances Up To 40 Km
- AGC Receivers
- Extend Temperature NEMA Range
- Rack card with NMS Option

Applications

- Telco CO-CO Multiplexing
- Fiber Optic Feeder
- Enterprise and Corporate Networks
- Leased Fiber Networks
- Mixed Protocol Multiplexing
- Military Tactical Communications
- ITS Traffic Networks
- METRO Monitoring Operation
- Homeland Security
- Oils and Gas Monitoring System

Ordering Information

Model	Descriptions
VK23LC03	Fiber Optic Data Transceiver (ODT/R), 1310nm SM LC 50Km, +5VDC
VK23RLC03	Fiber Optic Data Transceiver (ODT/R) Rack Card, 1310nm SM LC 50Km, +5VDC

*** Please Consult Factory for Additional Model Numbers***



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Technical Specifications

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System:	
Error Rate	1 in 10 ¹² or Better
Protocol	Asynchronous 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	LC
Data Port:	
Channel	1
Interface	RS-232 or RS-422
Data Format	Asynchronous
Data Rate	DC to 112Kbps
Interface selection	RS-232/422 Switchable
Connector	Female DB-25

Application

Remote Intersection



VK23

Up to 50 Km SM Fiber



Traffic Control Center



IL1600 Chassis

VK23R

Typical VK23 & VK23R Chassis In Traffic Control Application