

Overview

The VK230 is an extremely flexible and low cost solution for connecting multiple devices together in a fault tolerant data self-healing network. Unlike most modems, there are no limitations on the number of nodes present in the network. Using Packet Data Transmission technology, the VK230 can transmit and receive data at speeds up to 112 Kbps throughout the network. Each unit is capable of receiving data from either an uplink or downlink and then re-transmitting the data to the respective uplink or downlink direction.

With an embedded micro-controller in the unit, all configurations and equipment settings can be easily managed through the Network Monitoring System (NMS). Control signals which are used to control data path are user programmable, featuring: master, sub-master and slave node settings, anti-streaming logic (even though there is no data bubbling in the VK230 network), poll and respond data transmission timing, data rate, data terminating and other unique functions.

The Graphics User Interface (GUI) of the VK230 Network Monitoring System provides a user-friendly menu on a standard PC generally located at a control center. The network engineer may also utilize Vilink's TCP/IP Network Software Module option for monitoring multiple VK230 networks. There is also available a SNMP software package.

The VK230's optical interface is designed with Automatic Gain Controls (AGC) technique, a unique modulation scheme and state of the art circuit design. Specific optics provides the flexibility to meet any system requirement. The VK230 provides a female DB25 for data connections, a female RJ11 for NMS-PC connections, and a two-terminal block for power connection.



Features

- Supports RS-232, RS-422, and RS-485 Interfaces
- Asynchronous Data Speeds Up To 112 Kbps
- Master/Sub-Master/Slave Configurations
- Distances Up To 50 Km Between Two Nodes
- Dual Optics w/ AGC Receivers
- Network Monitoring System (NMS) with GUI
- TCP/IP Network Software
- SNMP Software Option
- Multimode and Singlemode Options

Applications

- ITS Traffic Applications
- Long Distance CCTV/PTZ
- SCADA Networks
- Utility System Networks
- Premise Networks
- Railway Networks

Ordering Information

Model	Description
VK230ST01	Fiber Optic Fault Tolerant Data Self-Healing Transceiver, Standalone, 850nm MM, ST
VK230ST03	Fiber Optic Fault Tolerant Data Self-Healing Transceiver, Standalone 1310nm SM, ST.
VK230ST05	Fiber Optic Fault Tolerant Data Self-Healing Transceiver, Standalone 1550nm SM, ST.
VK230RST03	Fiber Optic Fault Tolerant Data Self-Healing Transceiver, Rack Card 1310nm SM, ST.
VK230ST3/5	One Fiber System Fault Tolerant Data Self-Healing Transceiver, Standalone 1310/1550nm SM, ST.

Specifications

System:	
Error Rate	1 in 10 ⁹ or Better
Indicators	PWR, TX1, TX2, RX1, RX2
Network	NMS-PC w/ GUI
Interface	RS-232
Connector	RJ12
Environment	
Operating	-34°C to 74°C
Storage	-40°C to 95°C
Humidity	95% Non-Condensing
Electrical	
Interface	EIA RS-232/RS-422 Switchable
Connector	Female DB-25

Optical:	
Transmitter	Lasers, LEDs
Output Power	-16 dBm 850nm MM (min) -3 dBm 1300nm SM (min)
Receiver	PIN
Receiver Sensitivity	-35 dBm 850nm MM
(AGC)	-35 dBm 1300nm SM
Data:	
Data Rate	DC to 112 Kbps
Transmission	ATM Packet Data
Mode	Master, Sub-Master, Slave
Redundant	Self-Healing
Physical:	
Dimensions	1.25" x 6" x 4" (standalone) 5.25" x 12" x 1" (rack card)
Weight	1 lb. (standalone) <1lb (rackmount)
Power:	
Standalone	12 VDC @ 1 Amps
Rack Card	90-240 VAC / 47-63 Hz

Application

