VL Vi-Link
Fiber Optic Communications

Fiber Optic Industrial Multiplexer
4 x 10/100/1000M Ethernet
2 x RS-232/422 Data

VK240

VK Series

Email: sales@vi-link.net - Tel: 714-312-0654 - Web: www.vi-link.net

Overview

The VK240 Gigabit Multiplexer is specially designed to use at the Remote Locations in Intelligent Traffic and METRO Monitoring and Controlling Systems. It is extremely flexible for connecting multiple devices together in the **Ethernet TCP/IP Local Area Network (LAN)**.

The VK240 provides **4 ports 10/100/1000M Ethernet packaged data** for various IP devices such as HD IP Video and Traffic Violation Video Detection and **2 data channels** for connecting the old standard traffic monitoring and controlling **Pull & Response RS-232/422 data,** plus **PTZ Data** for HD IP PTZ Dome Cameras in the network.

The Dual Fiber Optic Interface are designed with *Automatic Gain Controls (AGC)* technique, utilized WDM technology to allow the users to use only one fiber per link, it is a very cost effective for connecting multiple Remote locations in Daisy-Chain and Redundant Ring configurations.

The VK240 Web-Based Management offers an easy-to-use and configuration facility, via the WEB interface, it can be programmed for basic management functions such as per port speed duplex settings, Port Trunking, VLAN, Port Mirroring, network security authentication and misc configurations. Additionally, the firmware includes advanced features such as IGMP snooping, QoS (Quality of Service), broadcast storm and bandwidth control, to enhance bandwidth utilization. The extended temperature capability for meeting NEMA specifications satisfies very critical applications requiring high quality data transmission performance with high reliability.

Applications include ITS Intelligent Traffic System, Metro Operation, HDTV Broadcasting System, IP cameras Surveillance, Homeland Security, Utility Management, Premise Networks, Military Hardened applications or anything requiring high speed Ethernet Network performance.

Features

- *4 x 10/100/1000M TX Ports*
- *2 x 1000 Base-SX Ports*
- *2 x RS-232/422/485 Switchable Data ports*
- *Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3z 100Base SX*
- *Built-in Web Interface for Remote Management*
- *Manual IP Setting / DHCP Client for IP Assignment*
- *9K Jumbo frame supports at all speed*
- *Supports Maximum Frame Size to 16 K*
- *Supports IEEE 802.1Q VLAN and VLAN groups*
- *Master / Slave Configuration*
- *Point-To-Point or Point-To-Multipoint*
- Distance Up To 50 Km Between Nodes

Applications

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

Order Information

Model	Descriptions
VK240ST03	Fiber Optic Industrial Multiplexer 4 x 10/100/1000M TX, 2 Self-Healing RS-232/422 (ODT/R), 1310nm SM ST 50Km, +12 VDC

VK240

Technical Specifications

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Specifications

System:

Error Rate	1 in 10^{12} or Better
Network Standard	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3z FX IEEE 802.3x Flow Control IEEE 802.3ad Port trunk with LACP IEEE 802.3w RSTP IEEE 802.1Q VLAN Tagging
Frame size	16K Bytes
Jumbo Frame	9000 Bytes
Layer 2 Management	Store-and Forward Remote Monitoring (RMON) Far-end Fault Indication (FEFI) Link Fault Pass Through (LFP) Auto Recovery Remote Management and Set Up Manual IP Address Setting / DHCP Loopback, Broadcast, Multicast, Unicast storm control Speed Duplex Mode Configuration Bandwidth Control on TP/FX

Environment:

Operating	-34^0 C to $+74^0$C
Storage	-40^0C to $+95^0$C
Humidity	98% Non-Condensing

Physical:

Dimension	6"x4"1.25" Or 5"x11.50"x1.1"
Power	12 VDC Or 90~240 VAC

Fiber Interface:

Port	2 x 1000 Base-SX
Data Rate	1000 Mbps
Transmission Mode	Full Duplex on 1 Fiber
Wavelength	T1310/R1550nm & T1550/R1310nm
Connector	ST
Distance	50 Km @ SM Between Nodes

Ethernet TX Interface:

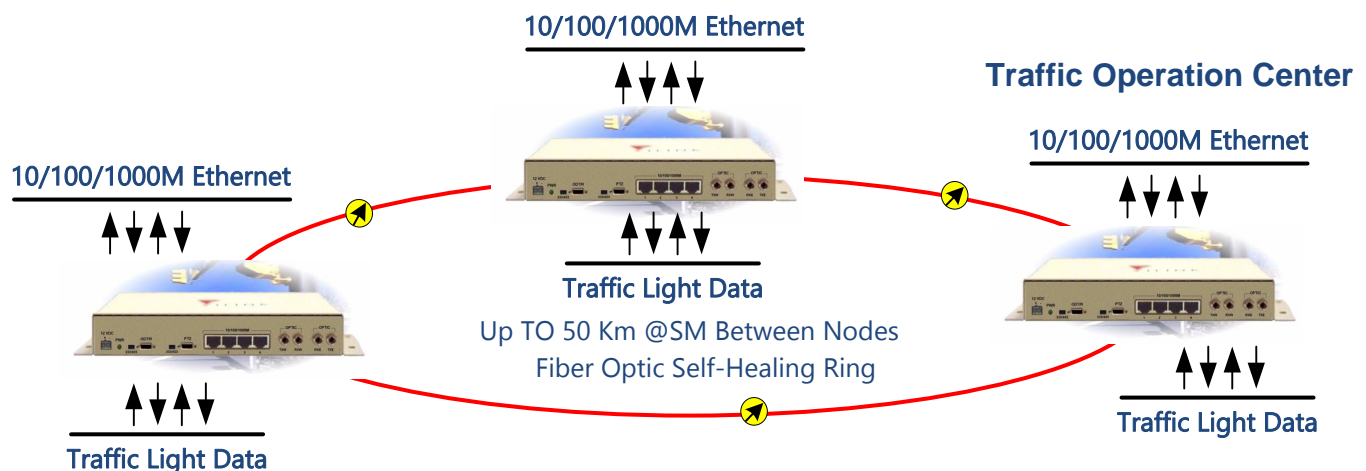|	
TX Port	4 x 10/100/1000 Base-TX Auto-Negotiation MDI/MDIX
Data Rate	10/100/1000 Mbps
Connector	RJ45
Transmission Mode	Half/Full Duplex

Data Interface:

Channel	2 Point-To-Multipoint Channels
Standard	EIA-RS-232/RS422 Switchable
Data Rate	DC to 112 Kbps
Default Set Up	9.6 Kbps
Connector	DB25 & DB9

Network Management :

Interface	Web Browser, SNMPv1, v2c Monitor
Port Configuration	Port enable, Auto-Negotiation, Full and Half Duplex mode, Flow Control Enable, Bandwidth Control
VLAN	16 IEEE 802.1Q VLAN / Q-in-Q VLAN
QoS	802.1p Priority, DSCP field in IP
SNMP MIBs	RFC-1213 MIB-2, RFC-1573 MIB RFC-2819 RMON MIB (Group 1)

Application

10/100/1000M Ethernet

Traffic Operation Center

10/100/1000M Ethernet

10/100/1000M Ethernet

Traffic Light Data

Up TO 50 Km @SM Between Nodes
Fiber Optic Self-Healing Ring

Traffic Light Data

Traffic Light Data