

Overview

The VK445 fiber optic multiplexer is designed to transmit up to 1 channel NTSC/PAL video, 2/4 channel FXO/FXS (voice), 2/4 RS-232/RS-422 Switchable data circuits and 2 ports 10/100M Ethernet via one single mode fiber optic cable.

The VK445 multiplexer's video encoder is designed to convert NTSC/PAL analog video signal from BNC connector into a real time H.264 (MPEG4-10) compressed digital signal and streams across the Ethernet, and the VK445 multiplexer's decoder is designed to convert digital compressed video back to NTSC/PAL analog video format. The video can also be played back by the PC, using standard media players such as Quick-time, Windows Media Player (WMP) or Real Player. In multicast mode, any person on the network is able to view the video stream on his/her screen.

The VK445 provides high quality audio transmission and is fully compatible with most telephone equipment including battery feed, over voltage protection, ringing, supervision, and hybrid balance. An asynchronous data transmission with RS-232 or RS-422 Switchable interface is available. Each channel is capable of transmitting and receiving data signals at speeds up to 9.6 Kbps.

The 10/100M Ethernet interface supports store-and-forward switching scheme to ensure low latency and high data integrity, eliminating unnecessary traffic and relieving network congestion along critical network paths. With an intelligent address recognition algorithm, it can recognize up to 4096 difference MAC addresses and enables filtering and forwarding at full wire speed.

The VK445 offers optical and power supply redundant option for critical telecommunication applications, it can also provide one single mode fiber optic cable system.

The VK445 multiplexer is ideal for implementing simple trunking systems for premise, metropolitan, and industrial environments. Applications for the VK445 include PCS trunking, SCADA, ITS, railway networks, electrical utility networks, and cellular networks.



Features

- *1-Ch NTSC Video*
- *2-Pt 10/100M Ethernet*
- *Up to 4-Ch FXO or FXS Voice*
- *Up to 4-Ch RS-232/422 data*
- *Redundant Optic Option*
- *One SM fiber Solution*
- *Order-wire channel for Maintenance*
- *SNMP Software Management Option*
- *Data rate: 300 bps to 9.6 Kbps*
- *Ethernet Supports: Full/Half duplex auto-negotiation, VLAN, Auto MDIX*
- *Voice channel supports: FXO for connecting to the CO and FXS for connecting to user's phone*
- *Singlemode transmission up to 50km*

Applications

- *Central Office Interconnects*
- *Local Exchange Digital Service*
- *PCS Trunking*
- *DSLAM Extensions*
- *Campus Networks*
- *Teleconferencing*
- *SCADA Networks*
- *Traffic Networks*
- *Corporate and Enterprise Networks*

Ordering Information

Model	Descriptions
VK445ST35-48	FO Multiplexer, 1-Ch Video, 4-Ch FXO/FXS, 2-Ch RS-232/422, 2-Pts 10/100M, 1310/1550nm, SM, ST, 50Km, 48 VDC
VK445ST53-12	FO Multiplexer, 1-Ch Video, 4-Ch FXO/FXS, 4-Ch RS-232/422, 2-Pts 10/100M, 1550/1310nm, SM, ST, 50Km, 12 VDC

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

Specifications

System:	
Error Rate	1 in 10 ¹² or Better
Indicators	LCD Display
NMS	GUI Interface, TCP/IP
SNMP	Optional
NMS Connector	RJ45, DB9 Console
Service Channel	Order-wire
Optical:	
Transmitter	1310/1550nm Lasers
Receiver	PIN
Optical Redundant	Optional
Power Budget	20 dB @ Singlemode
Connector	ST, SC, FC
Fiber Interface	One or Two Fibers
Distance	Up to 50 Km
Environment:	
Operating	-34° C to +74° C
Storage	-40° C to + 95° C
Humidity	98% Non-Condensing
Physical:	
Standalone	8.5" x 1.6" x 12"
Weight	10 lbs
Power	90 ~ 240 VAC / 48 VDC +12 VDC @ 2 Amp
Redundant Power	Optional

Video:	
Format	H.264
Input Size	NTSC: 720 x 480 PAL: 720 x 576
Signal Level	1 Vp-p
Compression	100:1 / 200:1 @ 640 x 480
Connector	BNC
Frame Rate	Up to 30 fps
FXO/FXS:	
Channel	2/4
Interface	FXO / FXS
Data Rate	1 DSO Time Slot
Ring Voltage	75 Volts
Ring Frequency	25 Hz
Line Impedance	600 Ohms
Connector	RJ11
Data:	
Channel	2/4
Data Format	Asynchronous
Interface	EIA-RS232
Data Rate	Up to 9.6 Kbps
Connector	RJ45
Ethernet:	
Ports	2
Standards	IEEE 802.3, 801.Q, VLAN
Data Rate	10/100M Full/Half Duplex
Supports	Auto Negotiation, Auto MIDX
Connector	RJ45

Applications

