

## Fiber Optic Modem T1(DSX1) & E1 (G.703)

#### **Datacom Equipment Series**

Model VK72



#### **Product Description**

The VK72 is a low cost reliable **plug-and-play fiber optic modem**. It is designed to transmit 1.544 Mbps T1 (DSX-1) and 2.048 Mbps G.703 E1 (CEPT) circuits via SFP optical fibers.

The modem provides transparent fiber optic transmission for T1 and E1 signals supporting all bipolar coding such as AMI, B8ZS and HDB3 with 120 Ohm line balance impedance interface. Specific application optics provide the flexibility to meet any system requirements. These SFP optics support multimode and single mode fiber. Transmission distances up to 10 Km via multimode and up to 50 Km via single mode are possible.

The VK72 is available as stand alone units with +5 VDC power adaptor or rack card unit for installation into the 16 slots 2RU universal rackmount chassis IL1600 with dual 90~230 VAC power supply

This fiber optic modem is ideal for implementing simple trunking systems for premise, metropolitan, and industrial environments. Applications for the VK72 include PCS trunking, SCADA, ITS, railway networks, electrical utility networks, and cellular networks.

#### **Features**

- One Channel Fiber Optic Modem
- 1.544 Mbps T1 and 2.048 Mbps E1
- AMI, B8ZS and HDB3 Coding
- 120 Ohm Line Balance Impedance
- Fiber Optic SFP Interface Port
- Multimode or Single Mode Transmission
- Distance up to 50 Km with Single Mode
- T1/E1 RJ48 Connector
- 19" Rack mounted or Standalone
- Meet FCC Part 15 Class A

#### **Applications**

- Local Exchange Digital Service
- PCS Trunking
- Fractional T1/E1 Campus Networks
- Teleconferencing
- T1/E1 splitting
- SCADA Networks
- Metro Networks
- Traffic Networks
- Corporate and Enterprise Networks

#### **Ordering Information**

Model	Descriptions
VK72LC03	T1/E1 Fiber Optic Modem SM SFP, 50Km, +12 VDC
VK72RLC03	T1/E1 Fiber Optic Modem SM SFP, 50Km, Rack Card
	*** Please Consult Factory for Additional Model Numbers***



# Technical Specifications

#### **Datacom Equipment Series**

Model VK72

System:		
Error Rate	1 in 10 <sup>10</sup> or Better	
Indicators	PWR, TXD, RXD	
Optical (SFP):		
Transmitter	Laser	
Tx	1310nm	
Receiver	PIN	
Rx	1310nm	
Power Budget	20 dB @ SM	
Connector	LC	
Environment:		
Operating	-34 <sup>0</sup> C to +74 <sup>0</sup> C	
Storage	$-40^{\circ}$ C to + 95°C	
Humidity	98% Non-Condensing	

T1/E1 Data Interface:		
Channel	1	
Data Speed	T1 = 1.544 Mbps +/- 50 ppm E1 = 2.048 Mbps +/- 50 ppm	
Line Code	T1 = AMI / B8ZS E1 = AMI / HDB3	
Impedance	120 Ohm	
Connector	RJ48	
Physical:		
Standalone	4.5" x 3.5" x 1.5"	
Rack Card	19" x 12" x 5.5"	
Power:		
Standalone	+12 VDC	
Rack Card	90 ~ 230 VAC	

### **Application**

#### **METRO Control Center**



Typical VK72 & VK72R Chassis In METRO Control Application