

TEK



TEK Cascade Fiber Optic Transceiver Series

Remote node: **TEK-FO33DTR(xVxD)**

Central receiver: **TEK-FO33DR(xVxD)**



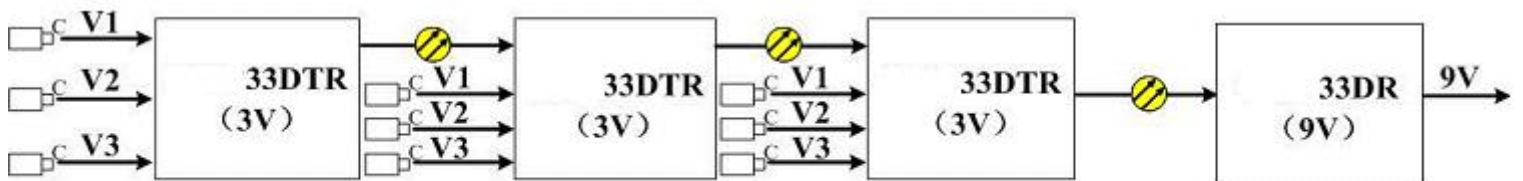
Description

FO33D can implement multilevel digital cascade via one fiber, The video channels of single wavelength cascade are up to 16 channels, the total capability of single fiber can be up to 128 channels if adopting CWDM to insert wavelength. Remote node video input channel can be 1 to 128 channel. Central receiver video output channel can be 1 to 128 channel. Every link of single wavelength can set up 16 nodes, Single link can be up to 128 nodes if adopting CWDM. Every node can be configured multi-channel RS422/RS485/RS232 data, multi-channel audio, multi-channel contact closure, 10M/100M Ethernet, E1, telephone, AIPHONE.

Features

- Single wavelength adopts digital cascade technology insert video in digital domain directly
- Exceeds the RS250C standard for SNR, DG and DP
- Bandwidth up to 6 MHz, SNR≥67dB
- Compatible with NTSC, PAL and SECAM
- 24- bit digital audio, 75dB SNR
- RS232, RS422, RS485 or Manchester data
- Super optical dynamic range, 0Km is not saturated
- Surface mount technology (SMT)
- Multiple wavelengths by adopting CWDM technology
- The video quality is independent of transmission distance and up to the maximum optical loss.
- Supported by TEK network management system
- Data transmission rate DC to 256kbps
- Power supply, fiber link, data state indication
- Rack-mount/stand-alone/19" 1U Rack mount Enclosure

Typical Applications



3 grade signal series: every node inset three video , central receiver nine video

Specifications

Video

Video channel	1-128
Video format	NTSC, PAL, SECAM
Voltage	1V _{p-p} , 75Ω
Max-input voltage	1.5V _{p-p} , 75Ω
Bandwidth	6 MHz
Differential gain	≤1%
Differential phase	≤1°
Video SNR:	≥67 dB
Encoding	8/10 bit PCM

Audio

Frequency Response	50Hz - 20kHz
Audio SNR	≥75dB
Audio coding	24 BIT digital audio
Sample resolution	48k

Data

Data type	RS232,RS422,RS485, Manchester
Baud rate	0-115.2 kbps
Bit error rate	10 ⁻⁹
Optional Signals	Contact Closure, E1, Telephone, AIPHONE

Ethernet

Standard	IEEE802.3
Data rate	10M/100M adaptive

Environment

MTBF	>100,000 hours
Operating temperature	-30°C to 74°C
Storage temperature	-40°C to 85°C
Humidity	0~95% non-condensing

Connector

Video	BNC
Optical	FC / ST / SC
Data	RJ45 / Terminal Block
Power	4-pin Self-lock Interface

Electrical and Mechanical

Power	Standalone :+5.5VDC Rack mount: from FO18 chassis
Dimensions	Standalone:182x201 x28mm
Weight	Standalone: 1KG Rack mount: 0.3KG
LED Indicators	Power, Fiber link, Video, Data.

Optical Power Budget

Fiber type	Transceiver Type	Receiver Type	Optical Power Budget (dB)	Transmission Distance (km)
Single mode	FO11DT(XX)-20KM-FC-S-A	FO11DR(XX)-20KM-FC-S-A	10	20
Single mode	FO11DT(XX)-40KM-FC-S-A	FO11DR(XX)-40KM-FC-S-A	15	40
Single mode	FO11DT(XX)-60KM-FC-S-A	FO11DR(XX)-60KM-FC-S-A	21	60
Single mode	FO11DT(XX)-80KM-FC-S-A	FO11DR(XX)-80KM-FC-S-A	29	80