

TEK Digital Non-compressed Video Convergence Transmission Network

Remote Access Module: FO55DT(XX)
Convergence Node Transceiver: FO55DTR(XX)
Central Convergence Receiver: FO55DR(XX)



Description

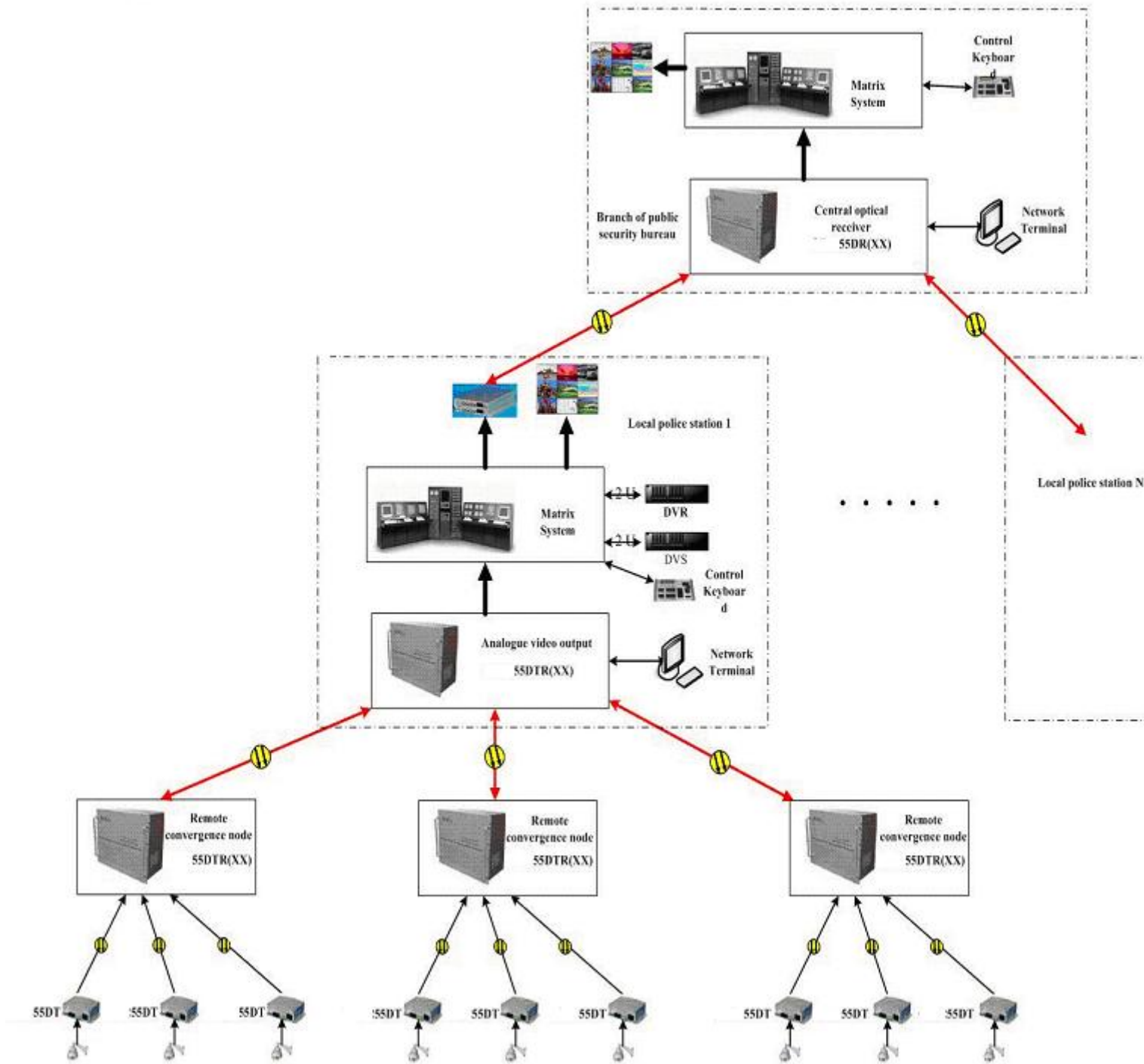
- FO55D digital Non-compressed Video Convergence Transmission Network is a multi-functional fiber optical transmission network based on digital non-compressed technology. FO55D has many features such as multi-cascade, all optical, digital converging, large capacity single fiber transmission, and high quality real-time digital uncompressed video.
- This system is most suitable for telecommunication companies' fiber optic network structure, and is the best solution to establish high quality digital video access network based on the current optical network.
- Remote module compatibility: All remote access module are interchangeable.
- Digital convergence technology: converging point adopts time division multiplexing technology and converges 16 channels of 155M video signals to 2.5G high speed data flow.
- Large volume converging ability: When the channel of video in the converging point reach 16, CWDM technology is used to multiplex many 2.5G high speed signal into one core fiber. One fiber can carry up to 128 1V1D front-end signals.
- All-way digital convergence: the whole convergence process has only one A/D to D/A exchange.
- Double route on the trunk transmission: double routes methods can be adopted in the big volume trunk transmission, which has optical healing function can and greatly enhanced the stability and reliability.
- Online extension ability: Convergence card and the connectors support plug and play. When an extension is needed, like adding one port in the front, it can be realized by adding one remote access module, and insert one receiving module in the convergence card, which can all be done online.
- Strong network management ability: FO55D has perfect whole network management ability, and the network software can manage every port in every device.

Features

- Exceeds the RS250C standard for SNR, DG and DP
- Bandwidth up to 6 MHz, $SNR \geq 67dB$
- The video quality is independent of transmission distance and up to the maximum optical loss.
- 8/10 bit digital PCM video coding
- Compatible with NTSC, PAL and SECAM
- Distance option of up to 120KM is possible
- Super optical dynamic range, 0Km is not saturated
- Supported by network management system
- Two RJ45 ports with option of plug-in interfaces in any combination
- 24-bit digital audio, 75dB SNR
- High-speed optical fiber digital transmission technology
- RS232, RS422, RS485 or Manchester data
- Data transmission rate DC to 256kbps
- Power supply, fiber link, data state indication
- Surface mount technology (SMT)
- Rack-mount/stand-alone/19" 1U Rack mount Enclosure

Typical Applications

Digital Non-compressed Video Convergence Transmission Network Diagram



Specifications

Convergence Index

Single wavelength convergence ability: Sixteen front end transmitters

Single fiber convergence ability: 128 units of front-end transmitters

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

Ethernet

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

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

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.