

HD Analog Video AHD-CVI-TVI (1~5MPX) PTZ Data Over One Fiber

HL1D

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HL Series

Overview

Vi-Link High Definition Analog HD Video equipment: The HL1D is a fiber optic digital transmitter/multiplexer for transmitting new Analog HD 5MPX, 4MPX, 3MPX, 2MPX, 1MPX, TVI/CVI/AHD video signals with PTZ data over a single mode fiber optic cable. This robust transmission platform utilizes the exiting Coaxial and Fiber Optic cables in the exiting system, it is a very cost effective solution for upgrading the old CCTV Analog Video System to the today HDccTV High Definition Analog Video System.

The HL1D is fully recognized all high definition analog video input formats including 25/30/50/60 fps @720P and 25/30 fps @ 1080P, its BNC interface can support up to 500m @ 720P and 300m @1080P. The Multiplexer/De-Multiplexer also offers a fully serial digital video encoding/decoding of real time TVI/ CVI/AHD video (10 bits sampling rate at 108 Mhz) providing adjustment free operation over a wide operational range. Utilizing fiber optic AGC receiver techniques for distances from back-to-back to 50 Km, our digital signaling offers superior receiver output stability, which is unaffected by changes in fiber path attenuation due to aging or splicing points. The HL1D rack cards can plug-in to the Vi-Link's VL1600 chassis which can accommodate up to 16 hot-swappable HL1D modules with dual AC or DC 100 watts power supplies. The extended temperature capability of the HL1D satisfies very critical applications requiring high quality video performance with high reliability.

In addition, the HL1D provides Auto Signal Compensation (ASC) allowing low signal distortion compensation over long distance transmission. The transmitter is a rugged standalone compact unit and the receiver is also a rugged standalone or a plug-in card for the rack version.

Applications include City and Highway Traffic Monitoring, METRO and Railroad Monitoring, Oil & Gas Monitoring, campus Security Monitoring, Airport Security System, Military Security Systems or any application requiring HD quality video performance.



Features

- High Definition HD Analog (TVI/CVI/AHD) signals
- PTZ Camera Control Data
- Real Time Digital Video Transmission
- Up to 5 MPX @ 1080P, 2560 x 1920P
- Sampling Rate 108 Mhz @ 10 Bits
- Supports 25/30/50/60 fps @ 720P and 25/30 fps @ 1080P, 1520p, 1960p
- Coax Cable supports 300m @ 1080P
- RS-485 PTZ Control Data Interface up to 9.6 Kbps
- AGC Single mode Transmission of 0 to 40 Km
- Standalone & Plug-in Rack Card
- NEMA Temperature

Applications

- City and Highway Monitoring
- Metro and Railroad Monitoring
- Oil & Gas Pipeline Monitoring
- Airport Security Systems
- Utility Systems
- Military Applications
- Premise Networks
- Any Digital HD Video Monitoring Requirement

Order Information

Model	Descriptions
HL1DTST03	1-ch HD Analog 5PMX TVI/CVI/AHD (Video Tx), Uni-Directional RS-485 Data, 1550/1310nm SM ST, 40Km, +5 VDC
HL1DRST03	1-ch HD Analog 5MPX TVI/CVI/AHD (Video Rx), Uni-Directional RS-485 Data, 1310/1550nm SM ST, 40Km, +5 VDC
HL1DRRST03	1-ch HD Analog 5MPX TVI/CVI/AHD (Video Rx), Uni-Directional RS-485 Data, 1310/1550nm SM ST, 40Km, Rack Card

*** add -422 for RS-422 Interfaces***

HL1D

Technical Specifications



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Specifications

System:				
Error Rate	1 in 10 ¹² or Better			
Indicators	PWR, Video Active, Data			
Optical:				
Transmitter	Lasers			
Tx	1550nm @ 3Gbps			
Rx	1310nm			
Receiver	PIN			
Tx	1310nm @ 125 Mbps			
Rx	1550nm			
Power Budget	20 dB @ SM			
Connector	ST			
Environment:				
Operating	-34° C to $+74^{\circ}$ C			
Storage	-40° C to + 95°C			
Humidity	98% Non-Condensing			
Power:				
Standalone	+5 VDC			
Rack Chassis	90~240 VAC			

TVI/CVI/AHD Video Interface:			
Channel	1		
Video Bandwidth	Up to 5 MPX		
Full HD Revolution	720P @ 25/30/50/60fps 1080P, 1520P, 1960P @ 25/30fps		
Sampling Frequency	108 MHz @ 10 bits		
Signal Level	1Vp-p +/-10%		
Connector	BNC		
Impedance	75 Ohms		
Coaxial Distance	300m@1080P		
Indicator	TX/RX		
PTZ Data:			
Channel	1 (Uni-Directional)		
Format	IEA RS-485		
Speed	DC to 9.6 Kbps		
Connector	Terminal Block		
Physical:			
Dimensions			
Standalone	1" x 5" x 4"		
Rack	19" x 12" x 4"		

Application

