VILINK
Communications Inc.

HDccTV Equipment Series   Model   HL220

Product Description

VILINK new High Definition Transport Video equipment: The VILINK HL220 series is a fiber optic digital transmitter/multiplexer for transmitting new HDTVI video signal and 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 Digital Video System.

The HL220 series is fully recognized all high definition transport 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 HDTVI 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 40 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 extended temperature capability of the HL220 satisfies very critical applications requiring high quality video performance with high reliability. In addition, the HL220 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 Transport Video HDTVI signals*
- *Real Time Digital Video Transmission*
- *Sampling Rate 108 Mhz @ 10 Bits*
- *Supports 25/30/50/60 fps @ 720P and 25/30 fps @ 1080P*
- *Coax Cable supports 500m @ 720P, 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*

Ordering Information

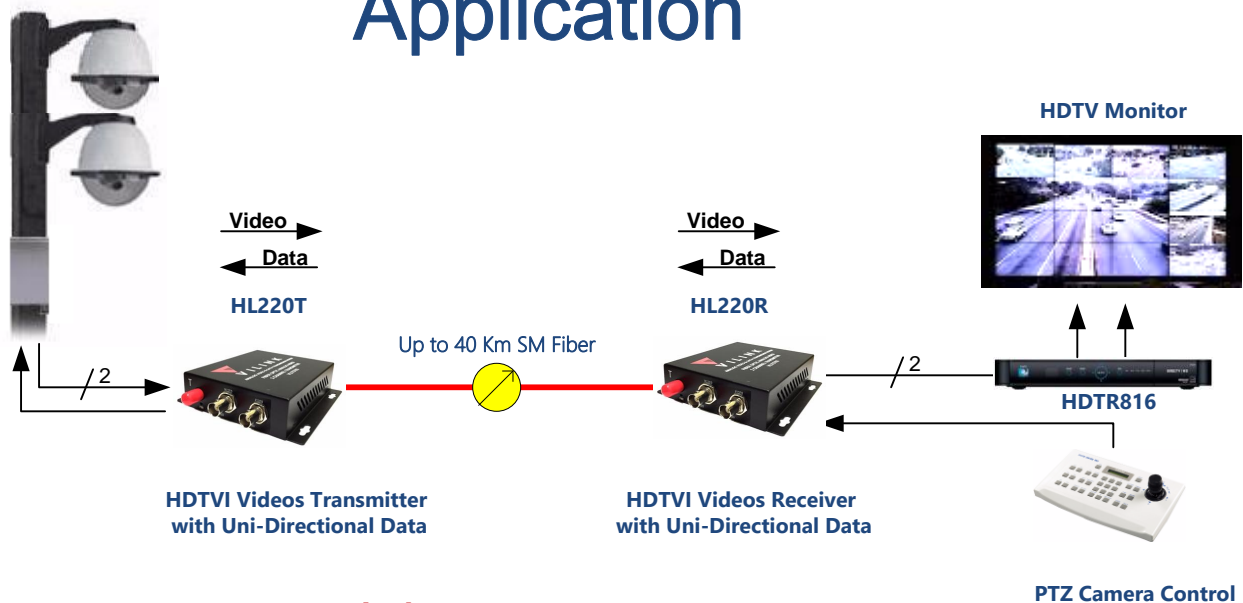| Model	Descriptions
HL220TST03	2-ch HDTVI (Video **Tx**), Uni-Directional RS-485 Data, 1310/1550nm SM ST, 40Km, +5 VDC
HL220RST03	2-ch HDTVI (Video **Rx**), Uni-Directional RS-485 Data, 1550/1310nm SM ST, 40Km, +5 VDC
HLR220RST03	2-ch HDTVI (Video **Rx**), Uni-Directional RS-485 Data, 1550/1310nm SM ST, 40Km, Rack Card
	*** Please Consult Factory for Additional Model Numbers***

System:

Error Rate	1 in 10^{12} or Better
Indicators	PWR, Video Active, Data

Optical:

Transmitter	Lasers
Tx	1310nm, 1550nm
Rx	1310nm
Receiver	PIN
Tx	1550nm
Rx	1310nm, 1550nm
Power Budget	20 dB @ SM
Connector	ST, FC, SC

Environment:

Operating	-34^0 C to $+74^0$C
Storage	-40^0C to $+ 95^0$C
Humidity	98% Non-Condensing

Power:

Standalone	+5 VDC
Rack Chassis	90~240 VAC

HDTVI Video Interface:

Channel	2
Video Bandwidth	45 MHz
Full HD Revolution	720P @ 25/30/50/60fps 1080P @ 25/30fps
Sampling Frequency	108 MHz @ 10 bits
Signal Level	1Vp-p +/-10%
Connector	BNC
Impedance	75 Ohms
Coaxial Distance	500m@720P, 300m@1080P
Indicator	TX/RX

PTZ Data:

Channel	1 (Uni-Direction)
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 5.5"

Application

HD-PTZ DOME Cameras

HDTV Monitor

Video ▶
◀ Data

Video ▶
◀ Data

HL220T

HL220R

Up to 40 Km SM Fiber

/ 2

/ 2

HDTR816

**HDTVI Videos Transmitter
with Uni-Directional Data**

**HDTVI Videos Receiver
with Uni-Directional Data**

PTZ Camera Control

**Typical HL220T & HL220R
In Traffic Monitoring Application**