

### 2 Channels High Definition Composite Video HDCVI & PTZ Control Data Over Fiber Optic Cable

HDccTV Equipment Series

Model HL120



## **Product Description**

VILINK new High Definition Composite Video equipment: The VILINK HL120 series is a fiber optic digital transmitter/multiplexer for transmitting new HDCVI 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 HL120 series is fully recognized all high definition composite 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 HDCVI 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 HL120 satisfies very critical applications requiring high quality video performance with high reliability. In addition, the HL120 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 Composite Video HDCVI 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 O to 40 Km
- Standalone & Plug-in Rack Card
- NEMA Temperature

#### Ordering Information Model Descriptions

# 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

ModelDescriptionsHL120TST032-ch HDCVI (Video Tx), Uni-Directional RS-485 Data, 1310/1550nm SM ST, 40Km, +5 VDCHL120RST032-ch HDCVI (Video Rx), Uni-Directional RS-485 Data, 1550/1310nm SM ST, 40Km, +5 VDCHLR120RST032-ch HDCVI (Video Rx), Uni-Directional RS-485 Data, 1550/1310nm SM ST, 40Km, Rack Card\*\*\* Please Consult Factory for Additional Model Numbers\*\*\*



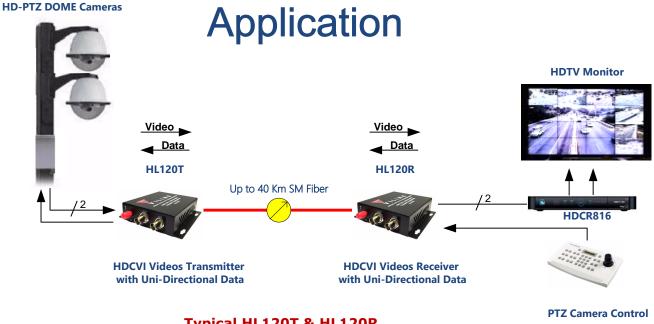
# Technical Specifications

### **HDccTV Equipment Series**

Model HL120

| System:      |  |
|--------------|--|
| Error Rate   | 1 in 10 <sup>12</sup> 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 <sup>°</sup> C to +74 <sup>°</sup> C |
| Storage      | $-40^{\circ}$ C to + 95°C                |
| Humidity     | 98% Non-Condensing                       |
| Power:       |  |
| Standalone   | +5 VDC                                   |
| Rack Chassis | 90~240 VAC                               |

| HDCVI Video Interface: |   |
|------------------------|---|
| Channel                | 2   |
| Video Bandwidth        | 45 MHz                                    |
| Full HD Revolution     | 720P @ 25/30/50/60fps<br>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"                          |



#### Typical HL120T & HL120R In Traffic Monitoring Application