

# AUDIO VIDEO SYSTEM

## HD Video + IP fiber system

Lightem Systems LHDVD series digital video fiber optic transmission system transmits one HD-SDI (1483.5M/1485Mbps) high definition digital video, or one SD-SDI (143M/177M/270M/360M/540Mbps) standard definition digital video or one DVB-ASI stream and one 10/100/1000Mbps ethernet network over one single mode fiber or multimode fiber with the standards of SSMPTTE259M, SMPTE297M, SMPTE310M, SMPTE305M (SDTI), IEEE802.3 or transmit one digital video signal with the standard of DVB-ASI stream. It features one loop-through for local monitoring at transmitter. The receiver outputs 2-way parallel HD-SDI digital video.

Thanks for the auto-cable equalization, cable driver circuit and signal jitter elimination circuit, high quality signal transmission over long distance fiber cable is released.



## FEATURES

- HD-SDI/SDI/ASI signal auto recognition
- Compliant with the standards of SMPTE292M, SMPTE259M, SMPTE297M, SMPTE310M, SMPTE305M (SDTI), SMPTE344M
- Compliant with the standard of DVB-ASI(EN50083-9)
- Auto adaption to the speed of HDSDI/SDI 143M,177M,270M,360M,540M,1483.5M,1485Mbps, or DVB-ASI
- A variety of installation options: 16-slot rack, particularly suitable for large volume optical transmission platform construction, and also available for 4-slot rack, 2-slot rack and single-slot rack, fixed 1RU 19-inch enclosure box.

## SPECIFICATIONS

HDMI HD Digital Video	
Signal Standard	SMPTE292M, SMPTE259M, SMPTE297M, SMPTE305M, SMPTE310M, DVB-ASI
Number of Input	1 plus 1 loop-through
Data Rate	19.4Mbps to 1485Mbps
Resolution	10 Bit
Signal Level	>380mVp-p
Auto-Cable Equalization	>200m@1.485Gbps, (Belden 1694A cable)
	>350m@270Mbps, (Belden 1694A cable)
Input Return Loss	>10dB (1485Mbps)
Impedance	75Ω
Connector	BNC
HD-SDI Output	
Channel Capacity	2
Signal Level	800mVp-p±10%
Rise/Fall time	<0.8ns
HD-SDI Jitter	<0.2UI(134ps)@100KHz
	<1.0UI(673ps)@10Hz
SDI Jitter	<0.2UI(740ps)@10Hz
	<0.2UI(740ps)@1kHz
Impedance	75Ω
Connector	BNC

# AUDIO VIDEO SYSTEM

<i>Ethernet Network</i>	
<i>Standard</i>	IEEE802.3z/AB 1000Base_T/SX/LX/ZX
<i>Data rate</i>	10/100/1000Mbps
<i>Auto Negotiation</i>	support
<i>Work mode</i>	Full-duplex or half-duplex
<i>Auto-cross</i>	Support
<i>Connector</i>	RJ45
<i>LED Indicators</i>	Data rate, fiber optic
<i>Physical</i>	
<i>Dimension(HxWxD)</i>	44×433×340(mm)
<i>Power Supply</i>	130 - 260VAC, 50-60Hz
<i>Power Consumption</i>	<10W
<i>Temperature</i>	0 to +50 Degree
<i>Humidity</i>	0 to 95% RH Non-condensing
<i>LED Status Indicator</i>	Power, Optical Link, Video Activity
<i>Optical</i>	
<i>Fiber Type</i>	Single mode or multimode
<i>Number of fiber</i>	1
<i>Wavelength</i>	1310nm/1550nm
<i>Distance</i>	0 to 40km, or 0-80km, or 0-100km
<i>Connector</i>	FC/PC, or SC/PC

## ORDERING INFORMATION

P/N	Description
LHDVD-IP	LHDVD series HD Video + IP (10/100/1000Mbps) fiber optic Transmission System