

# AUDIO VIDEO SYSTEM

## SD-SDI/HD-SDI/3G-SDI Video to Fiber Converter

L3GHD-SDI series 3G/HD SDI Fiber Converter support video to fiber conversion via simplex fiber (LC or FC port). The multi channel version supports multi channels optical multiplexing within the unit with a minimum transmission distance of 20km. Loopout option is available as option for 1Ch version for ease of local monitoring purpose.



### FEATURES

- 1/2/4/8/16 Channels Video of SD-SDI/HD-SDI/3G-SDI can be transmitted via 1 single fiber
- The Max rate of work is 3.2Gb/s
- Support SMPTE 292M (2.9Gb/s) clock recovery
- Support standard of 1485Gbps/M(HD-SDI/ SD-SDI), SMPTE 425M 3Gb/s Mapping(3G-SDI), SMPTE 424M 3Gb/s serial interface(3G-SDI)
- Out wavelength range is 1310nm, 1550nm and 16 other kind of CWDM wavelength ( comply with ITU-T G.694.2)
- Automatic cable equalization ,used for all rate below 3.2 Gb/s (Belden 1694A)
- LED Status Indication to monitor the working conditions
- Video transmission system can support many application branches structure
- The fiber port Support SFP transceiver hot-plugged
- The SDI video format support :  
625/25 PAL, 525/29.97 NTSC, 525/23.98 NTSC, 720p50, 720p59.94, 1080P 23.98/24/30/50/60, 1080i 23/24/30/50/59.94

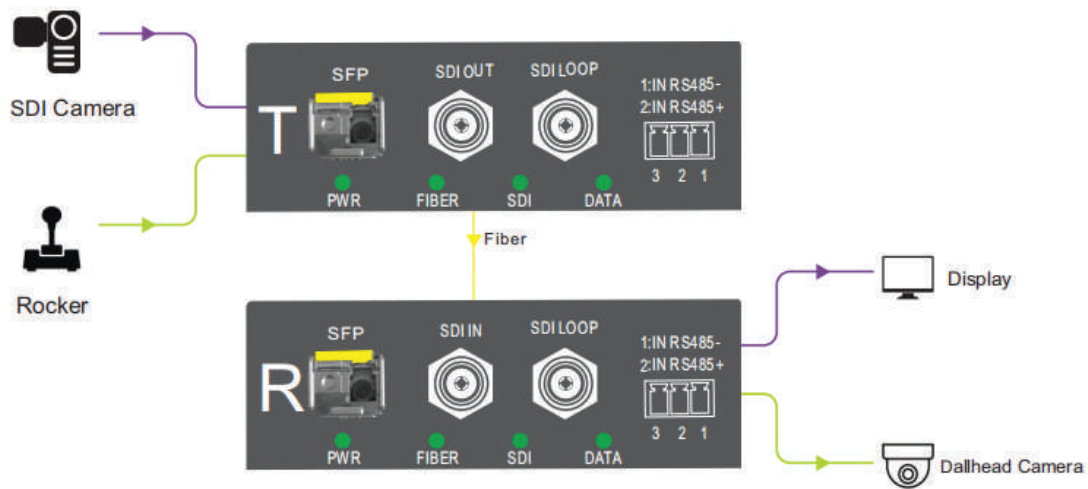
### SPECIFICATIONS

Video	
Number of channels	1/2/4/8/16 channels
Input/output Connector	BNC 75Ω
Input/output voltage	1.0 Volt p-p
Video Bits Rate	Max 3.2Gb/s
Video SDI Standards	270Mbps(SD-SDI)
	1.485Gbps/M(HD-SDI)
	SMPTE425M 3Gb/s Mapping(3G-SDI)
	SMPTE424M 3Gb/s serial interface(3G-SDI)
Data	
Data encode	RS485/RS422/RS232/Manchester
Physical interface	Industrial standard screw terminal
Frequency/Rate support	0~400K bps
Fiber Optic	
Number of Optical port	1x LC (SFP) or FC
Connector	Simplex LC
Transmission Distance	Multi-mode 550m
	Single-mode 20Km – 80Km
Wavelength	Multi mode: 850/1310nm
	Single-mode: 1310/1550nm (Optional)
Connectors	
Video	BNC 75Ω
Fiber Optical	1Ch: Simplex LC (SFP), Others: Simplex FC
Stand-alone power	1-4Ch: external power supply with DC jack
Rack power	8-16Ch: AC Power supply

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<i>Electrical &amp; Mechanical</i>	
Power adapter	AC 100-240V to DC 5V 2A
Power consumption	<3W
<i>Environmental</i>	
Operating Temperature	- 5 °C~+75 °C
Storage Temperature	- 5 °C~+85 °C
Relative Humidity	0%-95% (non-condensing)
MTBF	>100,000 hours
<i>Dimensions (L x W x H)</i>	
L3GHD-SDI-1V-1DU-T & L3GHD-SDI-1V-1DU-R	10.4 x 10.4 x 2.8 cm
L3GHD-SDI-2V-1DU-T & L3GHD-SDI-2V-1DU-R	16.7 x 19.2 x 4.9 cm
L3GHD-SDI-4V-1DU-T & L3GHD-SDI-4V-1DU-R	16.7 x 19.2 x 4.9 cm
L3GHD-SDI-8V-1DU-T & L3GHD-SDI-8V-1DU-R	48.3 x 22 x 4.4 cm
L3GHD-SDI-16V-1DU-T & L3GHD-SDI-16V-1DU-R	48.3 x 22 x 4.4 cm
LM3GHD-SDI-1V-1DU-T & LM3GHD-SDI-1V-1DU-R	8 x 4 x 2 cm

## APPLICATION DIAGRAM



### Remark:

- The Optical Power Budget fit Multi-mode(62.5/125m),Single-Mode(9/125 m).
- When using 50/125 m multimode fiber, subtract 3 dB from the optical power budget.
- Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
- Maximum transmission distance is also limited by fiber bandwidth.
- Power adapter for stand-alone units is manufactured by third party .Power adapter included US, European, UK or Australian power plug

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## PRODUCT IMAGES



L3GHD-SDI-1V-1DU-T &  
L3GHD-SDI-1V-1DU-R



L3GHD-SDI-2V-1DU-T &  
L3GHD-SDI-2V-1DU-R



L3GHD-SDI-4V-1DU-T &  
L3GHD-SDI-4V-1DU-R



L3GHD-SDI-8V-1DU-T &  
L3GHD-SDI-8V-1DU-R



L3GHD-SDI-16V-1DU-T &  
L3GHD-SDI-16V-1DU-R



LM3GHD-SDI-1V-1DU-T &  
LM3GHD-SDI-1V-1DU-R

## ORDERING INFORMATION

P/N	Description
L3GHD-SDI-1V-1DU-T & L3GHD-SDI-1V-1DU-R	1 channel forward 3G/HD-SDI video + 1 channel reverse RS485 data
L3GHD-SDI-2V-1DU-T & L3GHD-SDI-2V-1DU-R	2 channel forward 3G/HD-SDI video + 1 channel reverse RS485 data
L3GHD-SDI-4V-1DU-T & L3GHD-SDI-4V-1DU-R	4 channel forward 3G/HD-SDI video + 1 channel reverse RS485 data
L3GHD-SDI-8V-1DU-T & L3GHD-SDI-8V-1DU-R	8 channel forward 3G/HD-SDI video + 1 channel reverse RS485 data
L3GHD-SDI-16V-1DU-T & L3GHD-SDI-16V-1DU-R	16 channel forward 3G/HD-SDI video + 1 channel reverse RS485 data
LM3GHD-SDI-1V-1DU-T & LM3GHD-SDI-1V-1DU-R	1 channel forward 3G/HD-SDI video + 1 channel reverse RS485 data mini type converter