Mini-type 3G-SDI to Fiber Converter with Tally or Reverse RS485
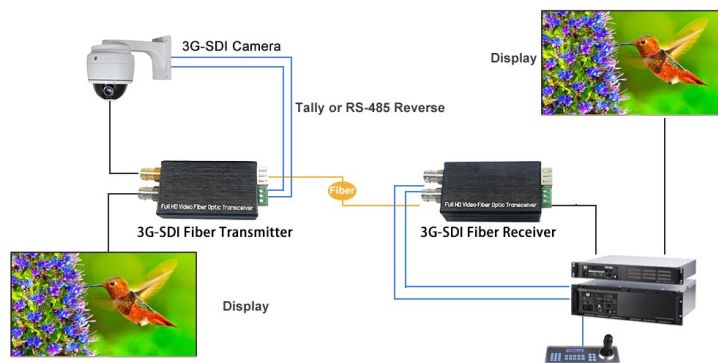

Features

- ◆ Each channel includes 8-channel audio embedded.

- ◆ Automatic cable equalization, used for all rate below 3.2 Gb/s (Belden 1694A).

- ◆ Automatic reclocking 270Mbit/s - 1.48Gbit/s - 3Gbit/s

- ◆ Directly compatible with HD-SDI camera systems

- ◆ Long transmission capability up to 80 km

- ◆ Hot swap and hot plug.

- ◆ Handle all Pathological patterns, fully digital non-compression broadcast level transmission.

- ◆ LED Status Indication to monitor the working conditions.

- ◆ super optic dynamic range and free of adjustment.

- ◆ 1470~1610nm CWDM wavelengths optional.

- ◆ industry level ultra-broad temperature range (-20℃~+70℃), adaptable to various environments.

Overview

M3G-1V Series Mini-type 3G/HD-SDI Fiber Converter supports 1-channel 3G/HD-SDI Video (audio embedded) & Tally or Reverse RS485 signal transmitted via fiber optical cable and monitor the signal locally over a 3G/HD-SDI loop output. 3G/HD-SDI Video over Fiber Converters includes one transmitter and one receiver for 1080P 3G/HD-SDI signal.

Application

Technical indexes

Fiber Optical interface	
Fiber interface	Simplex LC
Transmission distance	550m-20Km
Wavelength	1310nm/1550nm
Video	
Video interface	BNC
Video input/output impedance	75Ω
Video input/output voltage	Typical:1Vpp, Min 0.5Vpp, Max 1.5Vpp
Video Bits Rate	Max 3.2Gb/s
Differential gain (10%～90% APL)	<1%
SDI format support	625/25 PAL
	525/29.97 NTSC, 525/23.98 NTSC
	720p50, 720p59.94
	1080i 23/24/30/50/59.94
	1080P 23.98/24/30/50/60
Video SDI standard	270Mbps (SD-SDI), 1.485Gbps/M(HD-SDI)
	SMPTE425M3Gb/s Mapping(3G-SDI)
	SMPTE424M 3Gb/s serial interface(3G-SDI)
Data	
Physical interface	Industrial standard screw terminal
Data type	Tally or Reverse RS485
Frequency/Rate support	Max. 115200bps for RS422 Max. 57600bps for RS485
BER	$<10^{-9}$
Electrical	
Power adaptor	DC 5~25V
Power consumption	<5W
LED Indicator	
SDI	SDI video
P/T	Power Supply
Mechanical	
Dimensions (LxWxH)	80 x 40 x 20 mm
Weight	1KG/pair
Casing	Aluminum Case
Mounting Options	Desktop
Environmental	
Working Temperature	-20℃～+70℃
Storage Temperature	-40℃～+80℃
Working Humidity	0~95%
MTBF	≥100000 hours

TALLY or Reverse RS485 Connection

Transmitter TALLY or RS485 Signal Output Connection: (Can drive the LED indicator directly)

	TA	TB	TC
LED ON	LED -	LED +	N/A
LED OFF	N/A	LED+	LED-
Reverse RS485	Data+	Data-	N/A

Receiver TALLY or RS485 Signal Input Connection: (LED load type is only suitable for OC drive LED – driver)

	TA	TB	TC
Tally	Signal Input	Com	Com
Reverse RS485	Data+	Data-	N/A

Ordering Information

Model	Description
M3G-1V1T-MM	Mini-type 3G-SDI to Fiber Converter with Tally and loop out, MMF, LC Fiber Connector 500 meters, including Transmitter and Receiver, used by pairs
M3G-1V1D-MM	Mini-type 3G-SDI to Fiber Converter with Reverse RS485 and loop out, MMF, LC Fiber Connector 500 meters, including Transmitter and Receiver, used by pairs
M3G-1V1T-20	Mini-type 3G-SDI to Fiber Converter with Tally and loop out, SMF, LC Fiber Connector 20KM, including Transmitter and Receiver, used by pairs
M3G-1V1D-20	Mini-type 3G-SDI to Fiber Converter with Reverse RS485 and loop out, SMF, LC Fiber Connector 20KM, including Transmitter and Receiver, used by pairs
M3G-1V1T-40	Mini-type 3G-SDI to Fiber Converter with Tally and loop out, SMF, LC Fiber Connector 40KM, including Transmitter and Receiver, used by pairs
M3G-1V1D-40	Mini-type 3G-SDI to Fiber Converter with Reverse RS485 and loop out, SMF, LC Fiber Connector 40KM, including Transmitter and Receiver, used by pairs

Size & Dimension