

GSU SDI Fiber Receiver with Embedded Audio

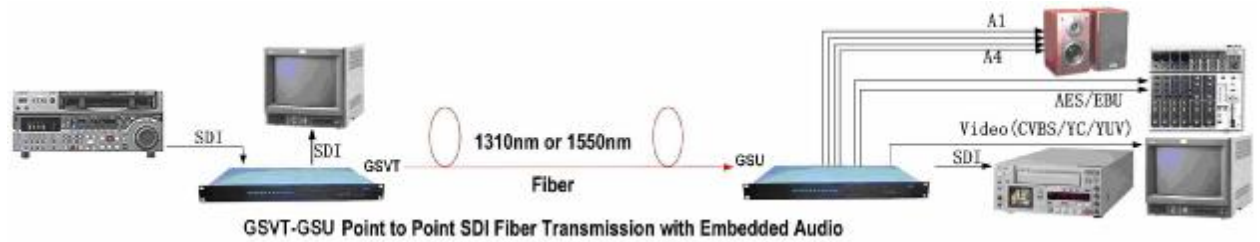
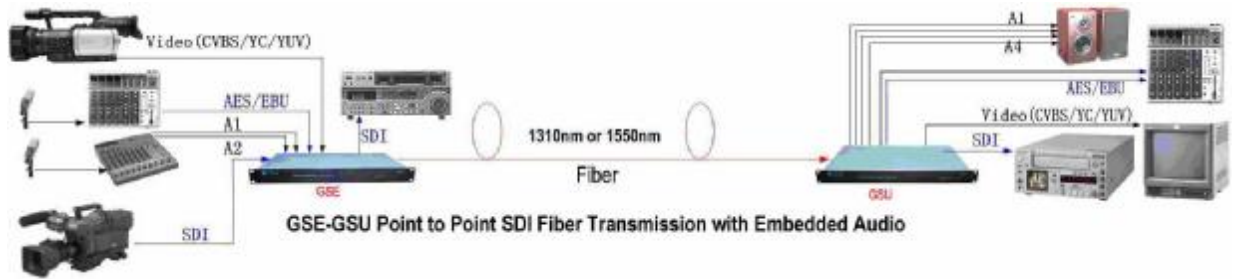


The GSU digital video optical receiver offers 2 SDI with embedded audio outputs, 1 CVBS video, 1 YC or YUV or RGB video port, two AES/EBU digital audio outputs and 4 analog audio outputs. Working with Greatway GSE optical transmitter or any other equipment meeting SMPTE297M and SMPTE272M, GSU receiver de-embeds the incoming SDI signal and processes the DA conversion, where the audio de-embedded location can be set in any one of the four layers in SDI. In the cascading case, the optical input of GSU can be replaced with the SDI Input, which enables GSU to de-embed maximum 16 analog audios and 8 AES/EBU digital audios.

Features:

- | CVBS, YUV/YC/RGB and SDI Outputs Available
- | SDI Digital Video Output meets 4:2:2 SMPTE259M/ITU-601 (270Mbps)
- | 4 Analog Audios, 2 AES/EBU Digital Audio and 2 RS232 control data outputs available, de-embedded SDI input in accordance with SMPTE272M standard
- | Analog audio output with ESD and auto balanced/unbalanced conversion
- | Maximum de-embedded 16 analog audios and 8 AES/EBU digital audios
- | 2 SDI Outputs for 250m cable transmission (BELDEN8281)
- | GSE+GSU (or CSVR) Fiber Transmission Distance Up To 120Km
- | System Topology can be point to point or point to multi points
- | Optical Transmitter or Optical Receiver can work with any other optical products meeting SMPTE297M and SMPTE272M
- | Front Panel Input Laser, SDI Status, Video Standard, Output Audio and Power Supply LED Status
- | Auto Negotiating NTSC (525/60) and PAL (625/50)
- | Support SMPTE RP165 EDH Standard

Applications



Specifications:

Optical Link Performance

Video		Audio	
Output Level	1 V _{P-P}	Output (Balanced)	Maximum 22 V _{P-P} (+20 dBm)
Video SNR	>71dB	Audio SNR	>85 dB (Unweighted)
DG	< 1%	Audio Distortion	<0.2 %
DP	< 1°	Bandwidth	20Hz~20 KHz @-0.5 dB
Flatness	±0.2dB to 5.75MHz	Isolation Between Channels	>90 dB @ 1KHz >90 dB @20KHz
Lum Non-linearity	<1%		
Lum/Chr Delay	<10ns	Audio Channel	4
Lum/Chr Gain	<1%		
Impedance	75Ω	Impedance	40Ω
Connector	BNC	Connector	XLR

Note:

1. The link consists of GSE transmitter and GSU receiver; the specification is tested at CVBS Video Input/Output and 4 embedded Audios.
2. When the video is YC or YUV, the video SNR>72dB
3. When the video input is SDI signal and the output is either CVBS or YC or YUV, the video SNR>73dB.
4. DG and DP data does not apply to 330 lines test.

GSU Receiver Specifications:

Analog Audio Output		AES/EBU Digital Audio Output	
Output Channel	4	Output Channel	2
Output Level	-20dBFS	Output Level	0.2~7.0V _{P-P}
Bandwidth	20Hz~20 KHz @-0.5dB	AES Frequency	48KHz (20/24bit)
Harmonic Distortion	<0.2%	Data Jitter	<±20ns
Impedance	40Ω	Impedance	110Ω
Connector	XLR	Connector	Balanced
SDI Digital Video Output			
Output Port	2	Rise/Down Time	<0.8 nS
SDI Standard	4:2:2 SMPTE259M (270Mbps)	Impedance	75Ω
Output Level	800 mV _{P-P} ±10%	Connector	BNC
Maximum Jitter	< 0.2UI (270Mbps)		
Optical Parameter			
Wavelength	1310nm or 1550nm	Receiver Power	-32dBm~-3dBm
Input Standard	SMPTE297M	Optic Connector	FC/PC or Requested
RS232	2 Ports, ≤10kbit/s Each		
Power Supply	AC 90~265V 50/60Hz ≤20W		
Dimension	19" 1U (430×230×43 mm)		