Pen-sized 3G-SDI Fiber Optical Extender

Features

 Support ST-2082-1 (12G), ST-2081-1 (6G), ST-424 (3G), ST-292 (HD) and ST-259 (SD); compatible with DVB-ASI and AES10 (MADI);

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 Both transmitter and receiver have clock recovery function; (clock restorer can reduce high frequency jitter and completely regenerate data with pure low jitter clock);



- The clock restorer is locked to 11.88Gbps, 5.94Gbps, 2.97Gbps, 1.485Gbps or 1.001 frequency division sub rate and SMPTE rate of 270Mbps;
- Signal input has automatic cable equalization (EQ) function, output has drive (CD) function;
- Single/multi-mode compatibility, multi-mode transmission distance 550M, single mode transmission distance 10KM
- Support status light display;
- Plug and play, no setting required;

Application

- SMPTE compatible with serial digital interface
- UHDTV/4K/8K/HDTV/SDTV video
- IP media gateway
- Digital video processing and editing

Ordering Information

P/N	Product Description			
PO12GTX	Pen-sized 1 channel forward 12G-SDI Fiber optical extender in pairs, 1310nm, up to			
RX-PZ	10km on SMF, ST optical connector, with External power adapter Input voltage			
	100VAC ~ 242VAC, 50-60Hz, output DC 5V,Product size 80*17*17mm			

Overview

Mini 12G-SDI ST fiber optic converter is developed by our company,with independent intellectual property rights, absorbing the advantages of similar products at home and abroad, combined with the actual demand of the market.through the one-core optical fiber can transmit one channel forward 12G-SDI video, realizing no delay, no

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compression, high-quality signal extension of 10km.

Mini 12G-SDI ST fiber optic converter built-in serial clock recovery, signal equalization and line drive, input automatic detection signal 12G-SDI/6G-SDI/3G-SDI/HD-SDI/SDI/ASI, compatible with SMPTEST2082-1 (12GUHD-SDI), ST2081-1 (6GUHD-SDI), SMPTE424M, SMPTE292M, SMPTE259M, SMPTE297M, SMPTE305M, SMPTE310M standards;

The circuit board of the mini 12G-SDI ST fiber optic converter adopts multi-layer design, stable and reliable, strong anti-interference ability; all components including connector, use products from internationally renowned manufacturers with reliable quality; aluminum shell design, corrosion resistance, outstanding thermal and conductive function;

Fiber parameter					
Wavelength	1310nm				
Rate	12Gbps				
Transmitter power	0~-3dB				
Receiver sensitivity	-12dB				
Fiber connector	ST				
Optical module parameter	Multi-mode fiber, 550m				
	Single-mode fiber, 10km				
Video parameter					
Protocol standard	SMPTE ST-2082				
SMPTE rate 270Mbit/s,1.48Gbit/s,2.97Gbit/s,5.94Gt			,5.94Gbit/s,11.88Gbit/s		
	SMPIE 259M	SD-SDI	480i, 576i		
	SMPIE 344M	ED-SDI	480P, 576P		
	SMPIE 292M	HD-SDI	720P, 1080i		
Support standard (digital	SMPIE 424M	3G-SDI	1080P60Hz		
video format)	SMPIE ST-2081	6G-SDI	2160P30Hz		
	SMPIE ST-2082	12G-SDI	2160P60Hz		
	75m at 11.88Gbps				
	120m at 5.94 Gbps				
	200m at 2.97 Gbps				
EQ mode cable	300m at 1.485 Gbps				
transmission distance	600m at 270Mbps				
Signal amplitude	800mV±10%				
Impedance	75Ω				
Equipment information					
The shell metal	Aluminium alloy				
Way to install	Direct plug-in				
Product size	80*17*17mm				

Specifications

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Product net weight (unit:	0.09KG
pair)	
Product weight (including	0.2KG
the outer packaging)	
Packing size	210*160*46mm
Input voltage	100VAC ~ 242VAC,50-60Hz
Power supply	DC 5V
Power dissipation	< 1.5W
Overload protection	provide
Over current protection	provide
Other parameter	
Operating temperature	-20°C ~+75°C
Storage temperature	-40°C ~+85°C
Relative humidity	From 5 to 95% (non-condensing)
MTBF	> 10,0000 hours

Packing List

S/no	Name	Unit	Quantity
1	Transmitter	Pcs	1
2	Receiver	Pcs	1
3	DC 5V adapter	Pcs	2
4	User's manual	Pcs	1

Attention

Lightning protection, static electricity and grounding:

It is recommended that when install the device, consideration should be given to the impact of grounding by lightning, and take prevention measures. Strong static electricity will damage the optical device and data chip in the equipment. It is recommended that when plug/unplug the data port of the optical converter, please disconnect the power supply of the optical converter first.

Fiber and optical components:

Be careful when plugging the optical fiber as optical components of the optical converter is very fragile, and it should avoid causing damage to the optical components. It should be noted that the light source produced by the optical components of the optical converter will be harmful to eyes, so do not have direct eye contact with the optical components of optical converter. If you need to detect the optical power of the optical converter, please use the optical power meter.

Equipment and installation procedures:

1.Optical fiber installation: please carefully insert the optical fiber into the optical fiber interface of the optical terminal after confirming that the optical fiber link meets the installation requirements.

2.Equipment installation: The equipment can be distinguished between transmitter and receiver, and it is stated clearly on the label and printed on the chassis of the equipment.