

1Ch Bidirectional 12G SDI Fiber Extender

1Channel Bidirectional



This 1-channel bidirectional 12G-SDI fiber optic transmitter, developed by our company, enables simultaneous bidirectional transmission of 12G-SDI video signals. Compact and lightweight, it fits fixed room and mobile on-site use, cutting installation and carrying costs. Adopting professional SDI driver chips, it supports signal equalization and clock recovery, delivering latency-free, distortion-free transmission with strong anti-interference for stable output in complex environments. Its key highlight is bidirectional video transmission without redundant devices, simplifying link setup for live return, remote monitoring, conference interaction and more. With industrial-grade stable design, it supports long-term non-stop operation, balancing durability and practicality.

Application : Ideal for broadcasting, live sports, security monitoring, multimedia conferences, it ' s a cost-effective choice for stable transmission.

Picture



Features

- Supports a maximum resolution of 2160P60Hz, with backward compatibility
- Delivers lossless, frame-free, and ultra-low latency signal transmission
- Enables simultaneous bidirectional transmission of 1-channel 12G-SDI signals
- Offers a standard fiber transmission distance of 20KM (optional: 40/60/80/100/120KM)
- Supports LC optical port transmission
- Supports audio and video synchronization
- Supports SDI clock recovery function
- Supports long cable equalization
- Supports LED status indication
- Supports standard 1/4-inch UNC screw mounting holes
- Supports plug-and-play functionality and hot-swapping
- Supports OEM/ODM customization

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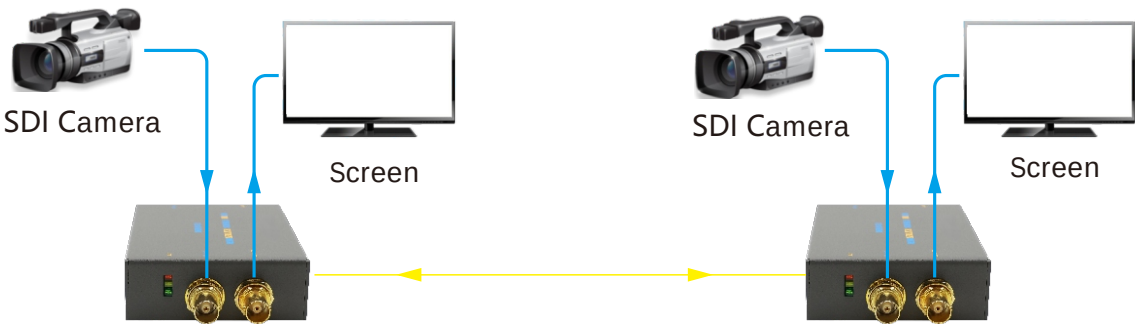
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Details

Input Interface	12G-SDI
Input Resolution	Up to 2160P60DCI, backward compatible with SD/HD/3G-SDI
SDI Color Space	YUV
SDI Color Space	4:2:2
Signal Amplitude	800±80mV
Output Interface	12G-SDI
Output Resolution	Up to 2160P60DCI, backward compatible with SD/HD/3G-SDI
SDI Bit Rate	270Mbit/s ~ 12Gbit/s
SDI Standards	SMPTE 259M、SMPTE 292M、SMPTE 424M、SMPTE ST-2081、SMPTE ST-2082
Jitter	≤ 0.3UI
Distance	Standard 20KM
Audio Input	Embedded audio in SDI signal
Operating Temperature	0℃ ~ +50℃
Operating Humidity	20% ~ 70%RH (non-condensing)
Storage Temperature	-20℃ ~ +70℃
Storage Humidity	0% ~ 70%RH (non-condensing)
Power Supply	DC 12V
Power Consumption	MAX 3W
Dimensions	101*73*26mm excluding Connector
Weight	Device main unit: 0.5kg (including module); complete package: 0.8kg

连接示意图



SDI cable

Fiber Cable