

Product Data Sheet

3G SDI Fiber Extender



Overview

The 3G SDI Fiber Extender transmits multirate SDI video, with embedded audio and metadata, as far as 10 kilometers (6.2 mi.) over single-mode fiber. The transmitter module receives one 3G/HD/SDI electrical input, and converts a SMPTE 292M, SMPTE424M, or DVB-ASI electrical SDI signal to single-mode fiber optic SDI signals. The receiver module receives the optical fiber signal from the input SFP connector, and then converts it to an electrical SDI signal.

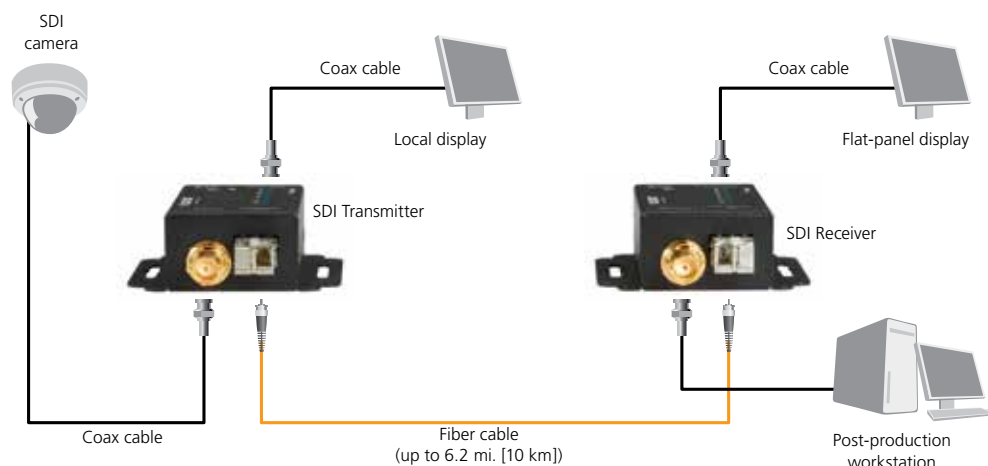
Use the extender to link an SDI camera with an SDI display or recording equipment in another building. It's ideal for a number of TV broadcast, video editing, and security or medical applications. The extender supports single-mode distances up to 10 kilometers (6.2 mi.) on its small form-factor pluggable (SFP) interfaces for simplex fiber. It also works over shorter distances using multimode fiber.

Also, the extender is immune to pathological test patterns (SMPTE RP-198), which guarantees high-quality, flicker-free transmission.

Basic Features

- Works with a range of SD-SDI, HD-SDI, or 3G-SDI devices.
- Features equalization on SDI input for extended distances.
- Also has video loopout ports for local and remote SDI connections.
- Automatically reclocks SDI signals to reduce video jitter.
- Boasts immunity to SMPTE RP-198 pathological test patterns.
- Transmits over just a single strand of single-mode fiber cable.
- Great for any TV broadcast, video editing, or security or medical application.
- Also use to reach SDI devices in high-level EMI/RFI environments.
- Autodetects SDI standard on its 75-ohm coax connectors.
- Handles higher SDI bandwidth of 2.97 Gbps (3G-SDI).
- Also works over multimode fiber at shorter distances.
- Wallmountable for space-saving installation.
- No software or driver installation required.

A typical application of the 3G SDI Fiber Extender.



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Specifications

Approvals	CE
Auto Reclocker Mode	Automatic detection: 270 Mbps/1.483 Gbps/1.485 Gbps/2.97 Gbps/2.967 Gbps; Automatic bypass: 177 Mbps/360 Mbps/540 Mbps
Cable Equalization	On coax connections: SD-SDI: 300 m (1000 ft.); HD-SDI: 150 m (500 ft.); 3G-SDI: 90 m (295 ft.) <i>NOTE: Distance depends on the characteristics and quality of the cable and the source signal.</i>
Data Rates	270 Mbps, 1483 Mbps, 1485 Mbps, 2967 Mbps, 2970 Mbps
Distance (Maximum)	On single-mode fiber: 10 km (6.25 mi.); On 50- μ mutlimode fiber: 550 m (1804.5 ft.)
Fiber Characteristics	SMPTE 297-2006 compliant; Operating wavelength: 1310 nm; Optical fiber: 8–10/125-micron single-mode; Loss budget: 0–15 dB
Output impedance	75 ohms
Protocols	SMPTE 259M (270 Mbps), SMPTE 259M (360 Mbps), SMPTE 292M/HDTV (1.485 Gbps and 1.485/1.001 Gbps), SMPTE 424M/HDTV (2.97 Gbps and 2.97/1.001 Gbps), DVB ASI (270 Mbps)
SDI Standards	SD/HD/3G-SDI
Video Bandwidth	2.97 Gbps, 2.97/1.001 Gbps
Video Resolutions Supported	HD: 720p at 50/59.94/60 Hz, 1035i at 50/59.94/60 Hz, 1080i at 50/59.94/60 Hz, 1080p at 24/30/59.94/60 Hz; SD: NTSC at 59.94 Hz, PAL at 50 Hz
Connectors	Transmitter: SDI input: (1) BNC M (75-ohm); SDI loopout: (1) BNC M (75-ohm); Fiber interconnect: (1) LC simplex on SFP; Receiver: SDI output: (2) BNC M (75-ohm); Fiber interconnect: (1) LC simplex on SFP
Indicators	Transmitter: (2) LEDs: (1) Power, (1) Signal; Receiver: (2) LEDs: (1) Power, (1) Signal
Power	Input: AC input: 100–240 VAC, 50–60 Hz, 0.3 A; Output: 5 VDC, 4 A
Dimensions	Each unit: 1.2"H x 1.6"W x 4.6"D (3 x 4 x 11.6 cm)
Weight	Each unit: 0.3 lb. (0.14 kg)

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