



12G-SDI Over Fiber 2, 4 or 8 Inputs

2, 4, or 8 input 12G-SDI CWDM transmitter/receiver kits over one single-mode fiber.



2 SDI front panel - original product image

Model Number

F-12G-2SDI-CWDM-TX/RX | F-12G-4SDI-CWDM-TX/RX | F-12G-8SDI-CWDM-TX/RX

Manufacturer: Thor Fiber

Primary Purpose: Thor Fiber 12G-SDI transmitter and receiver kits transport 2, 4, or 8 SDI sources over a single fiber. The system supports SD / HD / 3G / 6G / 12G-SDI with embedded audio for transparent, lossless, zero-delay live video transport.

Key Specifications

Spec Category	Extracted Value
Model Number	F-12G-2SDI-CWDM-TX/RX F-12G-4SDI-CWDM-TX/RX F-12G-8SDI-CWDM-TX/RX
Wavelength	1310nm / CWDM
Rate / Protocol	12Gbps; SMPTE ST-2082
Optical Connector / Distance	ST/PC; standard optical distance approximately 10km
Transmitter Power / Receiver Sensitivity	0 to -3dB / -12dB
Inputs / Loop-Out	2, 4, or 8 SDI inputs, model dependent; 1 channel SDI local loop-out per input source
SMPTE Rate	270Mbps / 1.48Gbps / 2.97Gbps / 5.54Gbps / 11.88Gbps
Video Input Options	SD-SDI 480i/576i; ED-SDI 480p/576p; HD-SDI 720p/1080i; 3G-SDI 1080p 60Hz; 6G-SDI 2160p 30Hz; 12G-SDI 2160p 60Hz
EQ Mode Cable Distance	75m at 11.88Gbps; 120m at 5.94Gbps; 200m at 2.97Gbps; 300m at 1.485Mbps; 600m at 270Mbps
Electrical / Mechanical	800mV +/-10%; 75ohm BNC; AC 90-240V; 1RU 440 x 230 x 44.5mm; 3kg

Core Features

- **Multi-Rate SDI Support:** Supports SDI 12G, 6G, 3G, HD, and SD; compatible with DVB-ASI and AES10 / MADI.
- **Clock Recovery:** Transmitter and receiver include clock recovery to reduce high-frequency jitter and regenerate low-jitter data.
- **Automatic Cable Equalization:** SDI signal input includes automatic cable equalization functionality.
- **Plug-and-Play SFP Optical Module:** Optical module can be replaced for different distances or interfaces according to the application.
- **Single-Mode Single-Fiber Transmission:** Default transmission distance is 10km over one single-mode fiber.
- **Status Light Display:** Front-panel indicators provide quick operational feedback.
- **Auto-Detect Operation:** Plug-and-play design with auto-detection of SDI interfaces and resolutions.
- **Loop-Out and Dual Output Design:** Transmitter provides loop-out for each SDI input, and the receiver provides dual outputs for every input.

Product Images



2 SDI rear panel



4 SDI rear panel



8 SDI rear panel

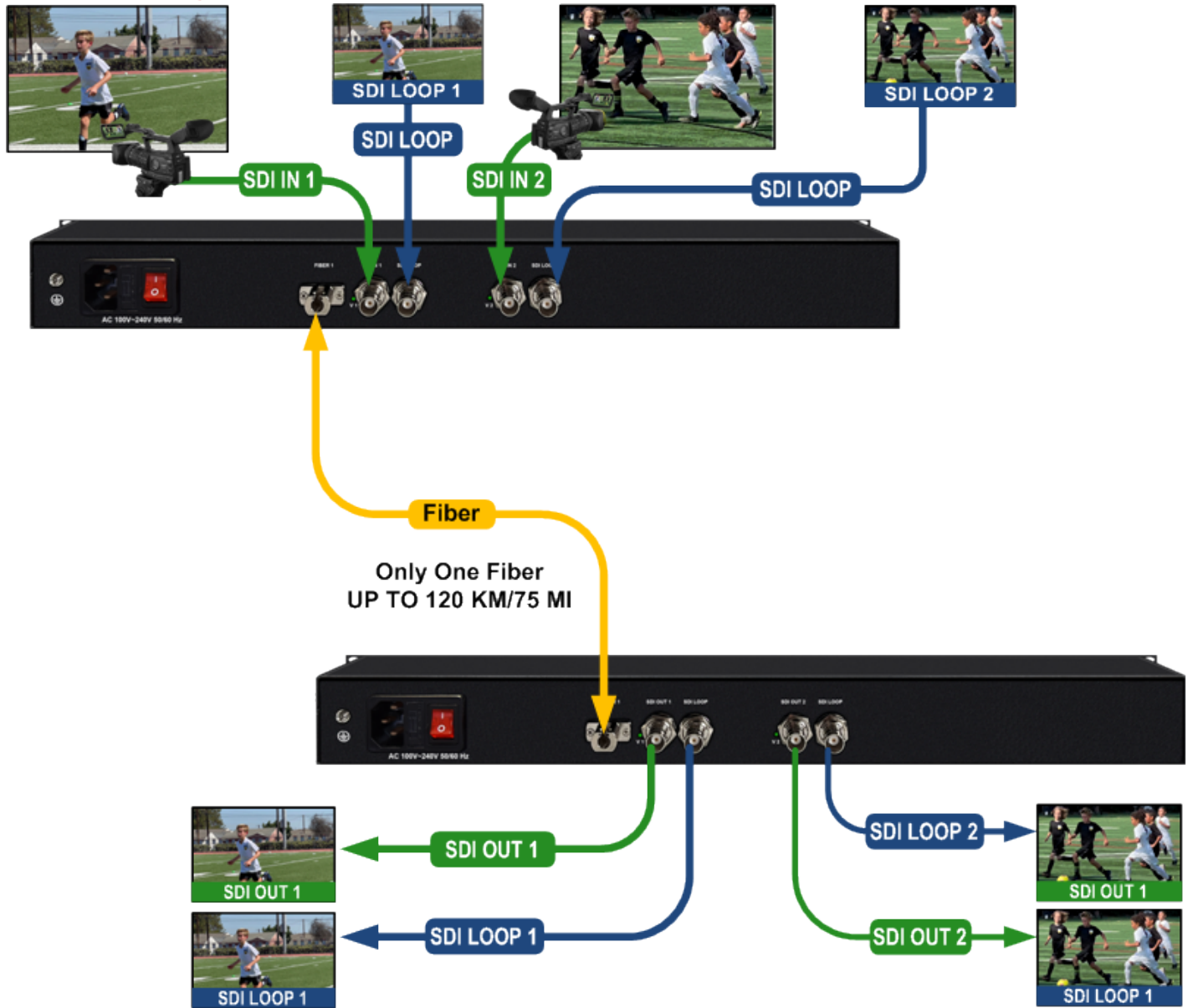
Target Applications

- Live sports production
- Government video systems
- 4K / 8K ultra-high-definition TV program production
- Stadium video transport
- Education and university broadcast systems
- Live broadcast production
- Live theater and concert production
- Racing video production
- Production and post-production workflows

Additional Product Information

Item	Extracted Value
Warranty	2 Yrs
Working Temperature	-20C to +75C
Storage Temperature	-40C to +85C
Relative Humidity	5% to 95% non-condensing
MTBF	>10,000 hours

Application Drawings



Model Selection

Model	Channels	Typical Use
F-12G-2SDI-CWDM-TX/RX	2 SDI inputs	Dual-camera or compact point-to-point 12G-SDI fiber transport
F-12G-4SDI-CWDM-TX/RX	4 SDI inputs	Medium venue, rack-to-rack, or production fiber transport
F-12G-8SDI-CWDM-TX/RX	8 SDI inputs	High-density broadcast, stadium, OB truck, or control room transport