



8 Ch SD/HD 3G-SDI with Gigabit Ethernet Over Single Fiber - 19 in. Rack Mountable

8-channel SD/HD/3G-SDI and bidirectional Gigabit Ethernet fiber transport kit over one single-mode fiber.

Technical Datasheet



Model Number

F-8SDI-3G-GET-TXRX-RM

Manufacturer: Thor Fiber

Primary Purpose: Thor Fiber F-8SDI-3G-GET-TXRX-RM transports 8 independent SD/HD/3G-SDI video channels together with bidirectional Gigabit Ethernet over one fiber. The rackmount transmitter/receiver system is designed for live broadcast, production, campus, venue, and remote-site video transport where SDI and LAN connectivity must travel over the same optical link.

Key Specifications

Spec Category	Extracted Value
Model Number	F-8SDI-3G-GET-TXRX-RM
Video Channels	8 channels of SD, HD, or 3G-SDI video
Ethernet	RJ45 10/100/1000 Mbps Gigabit Ethernet, unmanaged pass-through
Fiber Link	Single-mode fiber only; one optical fiber for SDI video and Ethernet
Distance Options	Up to 20km standard; 40km, 80km, and 120km versions available by selected model / special order
Optical Wavelengths	1310nm CWDM band: 1271, 1291, 1311, 1331, 1351, 1371, 1411, 1431nm; 1550nm CWDM band: 1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611nm
Optical Data Rate / Source	Up to 4.25Gbps, model specific; DFB laser module, CWDM
Optical Budget / Connector	15dB standard, 30dB long range; ST/PC standard fiber connector
Electrical Interface	Any serial digital signal up to 3.0Gbps; BNC 75 ohm; 1.0V peak-to-peak input level
Mechanical / Power	480 x 225 x 88mm; 8 to 15 lb depending on configuration; 100-240 VAC auto-switching PSU

Core Features

- 8-Channel SDI Transport: Carries 8 unique SD/HD/3G-SDI video signals over one fiber strand.
- Gigabit Ethernet Extension: RJ45 port provides unmanaged 10/100/1000 Mbps Ethernet pass-through over fiber.
- Rackmount TX/RX Kit: Includes rackmount transmitter and receiver hardware for professional installations.
- Single-Fiber Design: Video and Ethernet transport are combined over the same single-mode fiber link.
- Embedded Data Support: Passes SDI embedded audio and ancillary data with the video signal.
- Input Equalization and Reclocking: Helps maintain stable signal integrity for professional SDI workflows.
- CWDM Compatibility: Uses standardized CWDM channels for integration with CWDM-based systems.
- Real-Time Indicators: LED indicators support quick monitoring of input signal, optical link, and Ethernet status.

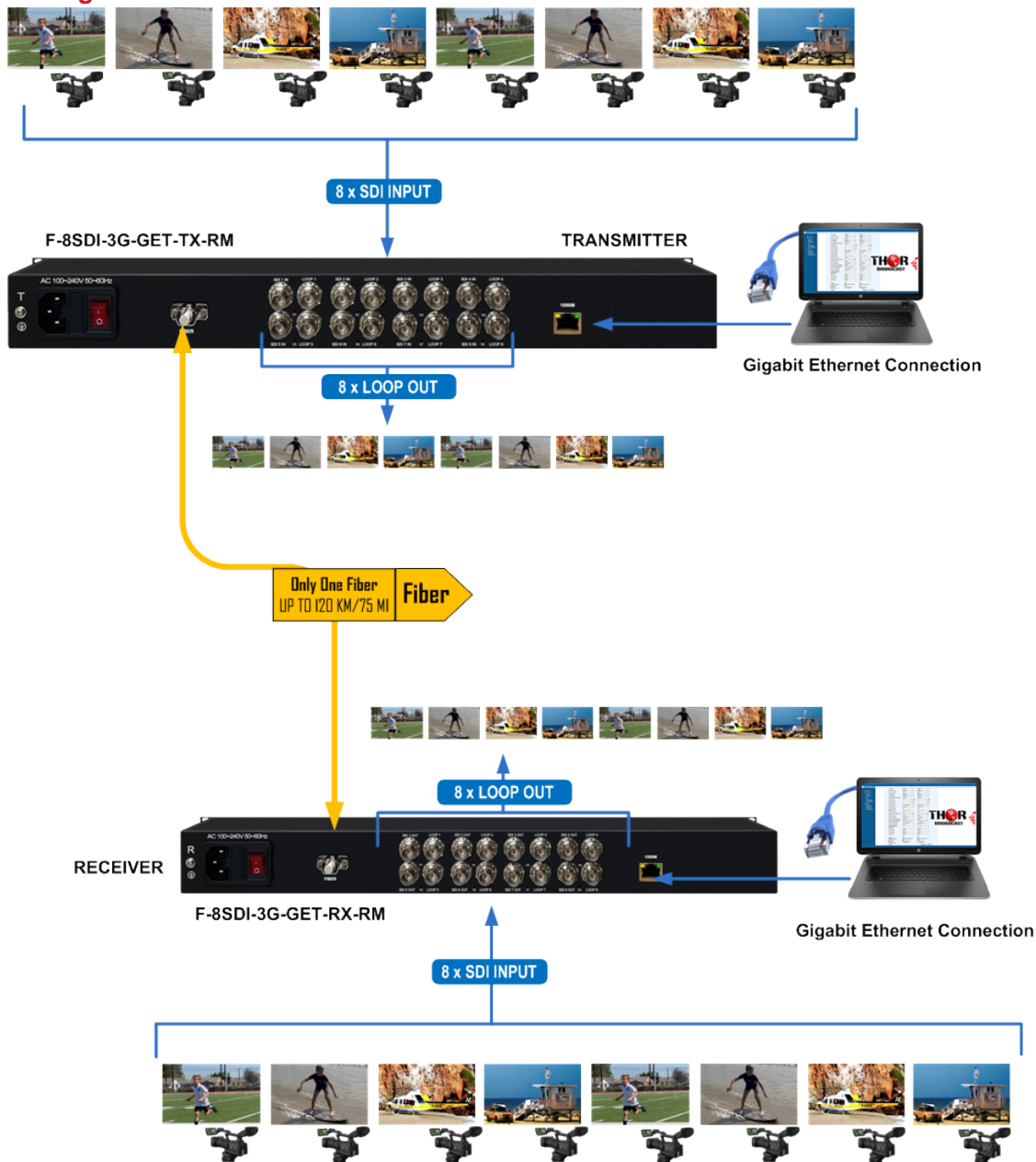
Target Applications

- Live broadcast and remote production
- Campus and multi-building video distribution
- Security and surveillance SDI transport
- Sports and venue video transport
- Event production with LAN extension
- Professional AV and broadcast infrastructure
- Studio-to-transmitter links
- Control room and monitoring workflows
- Long-distance SDI and Ethernet extension

Additional Product Information

Item	Extracted Value
Warranty	2 Yrs
Operating Temperature	-10C to +55C
Storage Temperature	-30C to +70C
Humidity	0 to 95%, non-condensing
Power	100-240 VAC auto-switching PSU

Application Drawings



Model Selection

Model	Description
F-8SDI-3G-GET-TXRX-RM	19 in. rackmount 8 Ch 3G-SDI + Gigabit Ethernet transmitter/receiver kit - up to 20km
F-8SDI-3G-GET-TX-RM	19 in. rackmount 8 Ch 3G-SDI + Gigabit Ethernet transmitter - up to 20km
F-8SDI-3G-GET-RX-RM	19 in. rackmount 8 Ch 3G-SDI + Gigabit Ethernet receiver - up to 20km
F-8SDI-3G-GET-TXRX-RMXX	40km, 80km, and 120km versions available by special order
Portable versions	F-8SDI-3G-GET-TXRX, F-8SDI-3G-GET-TX, F-8SDI-3G-GET-RX

Technical Specifications

Parameter	Extracted Value
Wavelength - 1310nm CWDM Band	1271, 1291, 1311, 1331, 1351, 1371, 1411, 1431nm
Wavelength - 1550nm CWDM Band	1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611nm
Fiber Cable	Single-mode only
Optical Data Rate	Up to 4.25Gbps, model specific
Optical Source	DFB laser module, CWDM
Optical Budget	15dB standard, 30dB long range
Electrical Input	Any serial digital signal up to 3.0Gbps; 1.0V peak-to-peak input level
I/O / Connectors	75 ohm BNC; RJ45 10/100/1000 Mbps Gigabit Ethernet unmanaged pass-through
Mechanical / Environmental	480 x 225 x 88mm; 8 to 15 lb; -10C to +55C operating; -30C to +70C storage; 0 to 95% humidity