





12G SDI Extender

Broadcasting Bliss



-Ultra-HD 12G-SDI Support: Transmits SD, HD, 3G, 6G, and full 12G-SDI video signals – perfect for highresolution 4K@60p workflows.

-Long-Distance Transmission: Supports up to 5 km (3.1 mi) over single-mode fiber.

-Compact & Low Latency: Mini-sized transmitter and receiver with minimal signal delay – ideal for portable or rack-mounted use.

-Standards-Compliant & Certified: Compatible with SMPTE ST-297, ST-2081, ST-2082. CE and FCC certified with LED status indicators.

-Plug-and-Play Connectivity: Features SDI input/output via BNC and duplex LC fiber connectors. Powered by 5V DC.



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FTSM PRODUCT PAGE





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FTSM: 12G SDI for Broadcasting Bliss



In today's fast-paced AV and broadcast industries, reliable transmission of high-bandwidth video signals over long distances is essential. The Ophit FTSM delivers zero-loss 4K UHD video performance via fiber optics, making it the trusted choice for broadcast studios, medical imaging, and mission-critical AV systems. Compact, rugged, and SMPTE-compliant, the FTSM enables seamless 12G-SDI connectivity with exceptional clarity and stability.



Supports Full 12G/6G/3G/HD/SD-SDI Resolutions

- Compatible with all SDI formats, including SD, HD, 3G, 6G, and 12G-SDI
- Perfect for uncompressed 4K@60p video over a single BNC cable



Reliable Long-Distance Signal Extension

- Transmits SDI signals up to 5 km (3.1 mi) over single-mode fiber
- Optical transmission eliminates EMI and signal degradation





- Ultra-compact mini module design (87 × 27 × 27 mm)
- Lightweight and easy to mount in any AV rack or mobile system
- Delivers real-time video with virtually no signal delay





Ideal for High-Demand Industries

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- Built for High-Performance AV Environments
- Broadcast Studios Flawless transmission for 4K/HD-SDI live production
- Medical Imaging Crystal-clear visuals for diagnostic and surgical display
- Government & Control Rooms Dependable, low-latency 12G-SDI delivery
- Live Events & Sports Long-range SDI coverage without signal loss



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Technical Specifications & Business Advantages



Technical Specifications

Specification	Details	Single-mode fiber
Resolution Support	Up to 4K UHD (3840×2160 @ 60 Hz) via 12G-SDI	Single-mode liber

Transmission Distance Up to 5 km (16,404 ft) over single-mode fiber

Standard Compliance SMPTE ST-297-2015, ST-2081, ST-2082; SFP MSA / SFF-8472 compatible

Duplex LC fiber (Tx/Rx), BNC for SDI In/Out **Connector Type**

EMI Protection Fiber optic link ensures zero electromagnetic interference

Installation Plug-and-play, no software required

5 V DC @ 2 A via external adapter **Power Supply**

Operating Temperature $0 \,^{\circ}\text{C} - 50 \,^{\circ}\text{C} (32 \,^{\circ}\text{F} - 122 \,^{\circ}\text{F})$



- 1. Supports uncompressed 4K@60p video for pristine image quality in live broadcast environments.
- 2. Provides ultra-low latency transmission essential for real-time video production and live feeds.
- 3. Extends 12G-SDI signals up to 5 km over fiber, enabling flexible, long-distance camera and equipment placement.
- 4. Compact and rugged design built to withstand demanding broadcast studio and outside broadcast (OB) conditions.
- 5. Ensures zero electromagnetic interference (EMI) for reliable, stable video streams in complex production setups.







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12G-SDI Fiber Optic Extender







FTSM

The FTSM transmits high-speed 12G-SDI signals over long distances using a fiber optic cable with a single channel (LC connector / single-mode fiber). This compact-size optical extender transmits 4K UHD resolution (3840 x 2160) @60Hz over a distance of up to 5km.

Feature Highlights

- 12G-SDI UHD video signal for long-distance optical transmission
- Supports video signals SD-SDI, HD-SDI, 3G-SDI, 6G-SDI, and 12G-SDI
- Near-zero latency EMI & Safety: CE, FCC
- · Single-mode fiber

Specification				
		— Transmitter	Receiver	
Connector	Input Output	SDI(BNC) Optical(LC)	Optical(LC) SDI(BNC)	
Video Bandwidth		270Mbps ~ 11.88Gbps		
Supporting Resolution & Distance 12G-SDI (3840x2160 @60Hz) Max 5km				
Power Consumption		1.5W (Typical)		
Dimensions		59W x 27.3D x 27H(mm) / 2.3"W x 1.07"D x 1.06"H (inches)		
Environment		Operating Temperature Range:0°C ~ 50°C (32°F ~ 122°F) Storage Temperature Range: -20°C ~ 70°C (-4°F ~ 158°F)		

Optical

- · Optical Source: 1310nm VCSEL
- Using fiber: 1-channel optical single-mode fiber (LC connector type)



*Optical module (SFP)

Typical Applications

 Digital Signage / Video Wall / Media Broadcasting / Video Conferencing / Large Venue Auditoriums / Control Rooms

Ordering Information

FTSM

- FTSM transmitter and receiver
- Optical module (SFP) transmitter and receiver
- Power adapter x2
- User manual

FTSM-C

- · FTSM transmitter and receiver
- Power adapter x2
- User manual

FTSM-OTR

- Optical module (SFP) transmitter and receiver
- User manual



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