



**HD-SDI Unidirectional Fiber Optic  
Transmitter/Receiver**

**LM-SF01**

**User Guide**

## 1. Features

1. 1ch unidirectional HD-SDI video with embedded audio over one fiber
2. Range from 19.4Mb/s to 1.485Gb/s
3. SMPTE 292M (1.485Gb/s) clock recovery
4. Support all SMPTE 295M standard,143Mb/s-360Mb/s
5. Support SMPTE 305M (SDI),SMPTE 310M (19.4Mb/s), SMPTE 344M (540Mb/s),M2S and DVB-ASI (270Mb/s) standard
6. Output wavelength 1310nm,1550nm and 16 types of CWDM (ITU-T G.694.2 compliant)
7. 150M automatic cable equalization, all the 1.485Gb/s rate below (Belden 1694A)
8. Optical network management system
9. LED status indicators monitor the critic parameters
10. Optical network system
11. Support hot swap
12. Support stand-alone,1U rack mount and 4U rack mount

## 2. Technical Specification

Serial TV BNC Input	
TV signal standard	SMPTE 292M, 259M, 297M, 305M, 310M, M2S, DVB-ASI, DVB-SSI and other Telecom/Datacom rate (19.4Mb/s - 1.485Gb/s)
Input channel	1 ( 1-ch loopout)
Reflection loss	>15DB
Equilibrium	0-150m @ 1.485Gb/s
Connector	75Ω BNC
Optic Output	
Channel	1
Type	Single-mode/fiber (multimode optional)
Wavelength	1310nm /1550nm
Reflection loss	> 15dB
Jitter	< 0.2UI
Connector	FC/PC (SC/PC optional)
Serial TV BNC Output (EO/OE)	
Output Channel	1
Signal level	800mV nominal
Rise/fall time	200Ps nominal
Overshoot	<10% amplitude
Reflection loss	> 15dB
Jitter	< 0.2UI
Connector	75Ω BNC
Power and environmental indicator	
Operating temperature	0 ~ +50
Pressure	1A@12VDC
Power	12W
EMI/RFI	FCC Part 15 Class A, EU EMC standard
Average time trouble-free	>100000 hours
Dimension	10CM*13.5CM*2.8CM

### 3. Applications

Remote OB Van/Truck Video Feeds;  
Broadcast Studio Camera Feeds;  
Long-haul Signal Transport;  
TV station/video conference;  
Lecture Hall Projector Connectivity;  
Medical/Surgical Room Broadcast;  
Small corporate campus video links

### 4. Ordering information

HD-SDI Unidirectional Fiber Optic Transmitter/Receiver

Transmitter

1-Ch HD-SDI with embedded audio input and looping out, single mode, single fiber, FC/PC fiber connector, BNC video interface, 20km, stand-alone

Receiver

1-Ch HD-SDI with embedded audio output, single mode, single fiber, FC/PC fiber connector, BNC video interface, 20km, stand-alone

### 5. Application Diagram

