



SDI Data Media Fiber Converter
Model: LM-SF02

User Manual

Product Overview

LINK-MI LM-SF02 The HD/3G-SDI to fiber converter includes a transmitter and receiver, which is a low cost transfer device for unidirectional HD/3G-SDI video ,1ch 10/100M ethernet and 1ch rs422 data over a single mode and multimode optical fiber cable transfer. It is designed by digital optical transfer technology and supports SMPTE292M /SMPTE259M /SMPTE424 signal.

And the receiver can be put into a standard19” 3.5U rack mount chassis,which support 16PCS receiver insert cards with 2pcs 90~240V power supply.

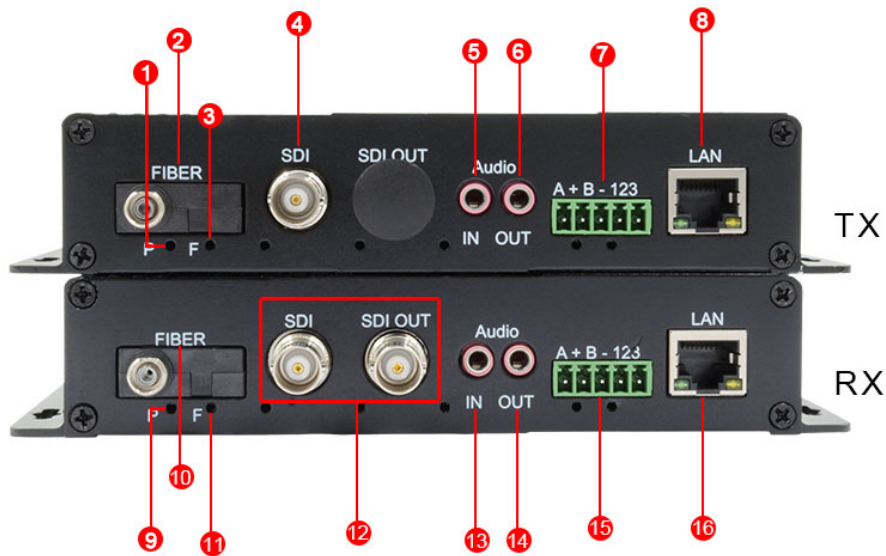
Main features

1. 3G/ HD-SDI video (embedded audio signal) over a fiber with lossless long-distance transmission
2. Support 1CH unidirectional or bidi RS485 or RS422 or RS232 control data transmission , 1ch full duplex 10/100M Ethernet.
3. ASIC integrated designed technology with core independent intellectual property rights
4. Advanced circuit design, full hardware program to ensure the reliability of equipment, consistency and stability
5. Widely used in TV live broadcast, high-definition video conferencing, high-definition video surveillance and other fields
6. Support single-mode or multi-mode fiber transmission (the user needs to confirm the transmission cable type)
7. Provide commonly used LC/FC / SC / ST fiber interface
8. Maximum transmission distance up to 120KM over single mode fiber
9. 3G-SDI high digital Video and audio signal optical transmission
10. Adapt to SDI 270Mbps, 1.485Gbit Speed and 3G automatically
11. Accept customerization and OEM business mode.

Standard Package

SDI fiber transmitter	1pcs
SDI fiber receiver	1pcs
Power Supply Unit 5V/2A	2pcs
User manual	1pcs

Interface overview



- | | |
|------------------------------|------------------------------|
| ① Status of Power Input | ⑩ Optical Fiber Output Port |
| ② Optical Fiber Output Port | ⑪ Status of Fiber Connection |
| ③ Status of Fiber Connection | ⑫ SDI Output Ports |
| ④ SDI Input Port | ⑬ Audio Input Port |
| ⑤ Audio Input Port | ⑭ Audio Output Port |
| ⑥ Audio Output Port | ⑮ RS422 Port |
| ⑦ RS422 Port | ⑯ Ethernet Port |
| ⑧ Ethernet Port | ⑰ Power input port |
| ⑨ Status of Power Input | |



Specification

Optical :

Wavelength	multi-mode 850nm / 1300nm, single-mode 1310nm / 1550nm
Output Power	-10~-4dBm
allowable chain loss range	18dBm~35dBm
Optic fiber	50/125u multimode, 62.5/125u multimode, 9/125u single mode
Light receiving sensitivity	<=30dBm
Optical connector	LC FC、 ST、 SC (selectable) ,single or dual fibers
Distance	0~500M (MM) / 0~80KM (SM)

Video:

SDI	
Signal Type SDI	SMPTE 424M, SMPTE 292M, SMPTE 259M
Video Format	1920*1080P60;1920*1080P50;1920*1080P30;1920*1080P25 1920*1080P24;1920*1080I60;1920*1080I50;1280*720P60;1280*720P50;525i ;625i
Data Rates	270Mbit/s - 1.48Gbit/s, 3Gbit/s
Cable Equalization	Automatic cable EQ (Belden 1694A cable) 250m @ 270Mbit/s, 140m @ 1.5Gbit/s,80m @ 3Gbit/s
Connector	BNC 75 Ohm
General	
Input Power	5V, 0.2-2.0A
Power consumption (maximum)	Transmitter: 2.5W Receiver: 2.5W
Operating temperature	-20°C to 60°C
Storage temperature	-40°C to 85°C
Operating humidity	0 ~ 95% (non-condensing)
Case color	Black
Case material	aluminum
Dimension	15.5x12x3.2CM
Net Weight	1Kg per pair
Case material	Aluminum
MTBF:	>100000 hours

Data

Data protocol	RS422
Data rate	0~500 Kbps
Error rate	< 10 ⁻⁹
Connector	Phoenix Terminal

Ethernet :

Work mode	Full duplex/half duplex
Data Rate	10/100Mbps(AUTO)
connection terminal	RJ45

Indicator Light	status	
R	On	Device works smoothly
	Off	Device not works smoothly
S	On	SDI signal on
	Off	SDI signal off
P	On	Power on
	Off	Power off

Installation

- 1、 Connect SDI signal to SIN port by SYWV cable I
- 2、 Connect SDI output signal to SOUT port by SYWV cable
- 3、 Connect fiber to OPT.
- 4、 Power on

Application Graphics

