

## 3G/HD/SD-SDI, RS422, Audio, Ethernet, Tally, Intercom & Return Video over Fiber Multiplexer

Best.nr: 20100478



**Important Notice for the Customized product :**

1. Customized product,, Image for reference only, the product will be subject to the actual shipment;
2. Image show possible functions can be added, please contact our sales before order



### Overview

The LNK-MSDI Series allows you to transmit 3G, HD or SD-SDI as per SMPTE 424M-2006, 292 and 259 with the ability to transmit 10/100 Base-T Ethernet RS422, Audio, Ethernet, Tally, Intercom & Return Video over single mode or multimode fiber. All data channels are available simultaneously. The system transports a 3G/HD-SDI signal from the camera to the Base Station and a return video (3G/HD-SDI), Remote control data, genlock, intercom, tally, audio and 10/100M Ethernet are also provided. The system puts all of the signals needed for multi-camera 3G/HD-SDI production onto a SM/MM tactical or SMPTE hybrid fiber cable, insuring robust, trouble-free connectivity on any studio or remote production.

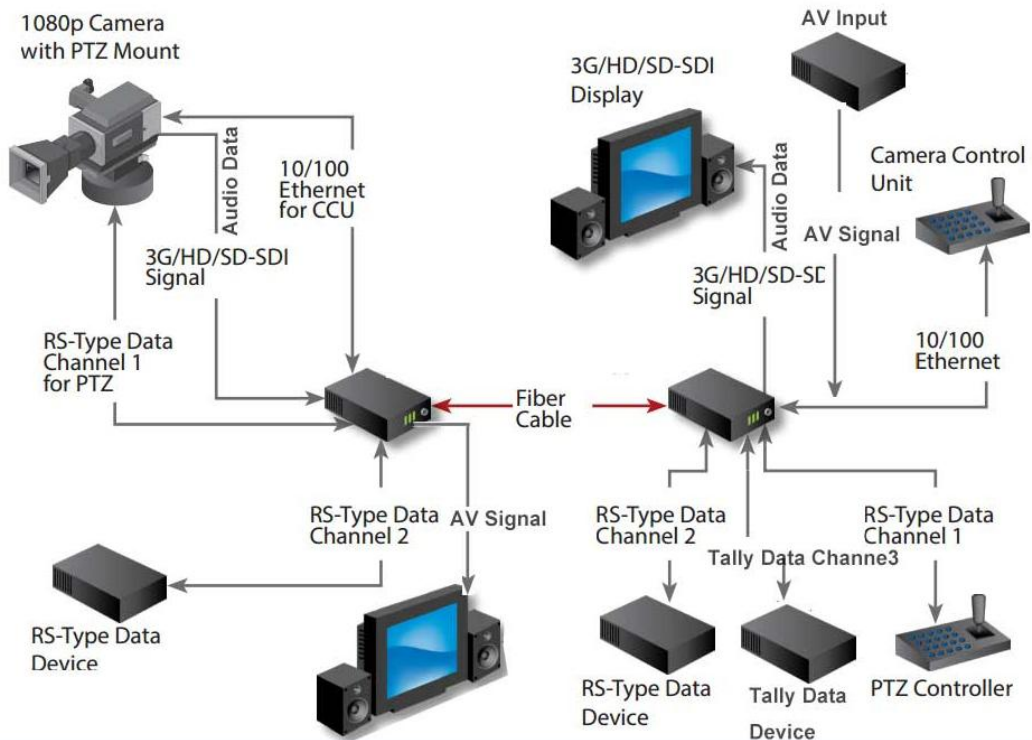
## **Features**

- 3G/HD/SD-SDI - This product supports SMPTE complaint 3G, HD and SD-SDI data rates
- Handle all Pathological patterns
- Automatic cable equalization to ensure signal integrity
- With Remote & Tally & Audio(Intercom) & Return video
- 10/100 Ethernet - This product transmits and receives 10/100 Ethernet.
- Automatic cable equalization to ensure signal integrity
- Automatic rellocking 270Mbit/s - 1.48Gbit/s - 3Gbit/s
- Support signal type: 270Mbit/s to 3Gbit/s according to SMPTE 424M, SMPTE 292M and SMPTE 259M standards, DVB-ASI
- Directly compatible with 3G/HD/SD-SDI camera systems and support RS-232, RS-422, and RS-485 data protocols
- 10+Km on single mode fiber or 300m on multimode fiber transmission
- Terminal block power input for industrial application
- Supports hot swapping and hot plugging
- Industry-grade of operating temperature from -10°C to 75°C , which is applied to the different working environment

## **Applications**

- EFP (Electronic Field Production)
- 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
- Building to Building video conference calling
- Small corporate campus video links

## Typical Application



## Technical Indexes

General Specifications	
Work Temp	-10°C to +75°C
Storage Temp	-40°C to 85°C
humidity	0 ~ 95% (non-condensing)
Input power	DC5V 3A
Power consumption	15W
Net weight	4kg
Appearance size	172mm*167mm*45mm (LxWxH)
Optical Fiber	
Wavelength	1310nm / 1550nm / CWDM
Output Power	-6~-1dBm
Rx sensitivity	<-18dBm
Transmission Distance	SM fiber 10+km , MM fiber 300m
Optical connector	Du1 LC /FC/ST/SC/MX/ Lemo / Neutrik (optional)
SDI input/output	
Signal format	SMPTE 424M, SMPTE 292M, SMPTE 259M
Data rate	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

SDI interface	BNC 75 Ohm
<b>Intercom</b>	
Camera Optic Adaptor	
Interface	4pin XLR(Male) /5pin XLR(Female)/ 3.5mm headset jack
Microphone	Mic inputs with mute and pre-amps
Headphone	with volume up or down
Audio	Balance or unbalance line level
<b>Tally</b>	
Camera Optic Adaptor	
Interface	4pin air head or 3pin mini XLR
Output	Dry Contact Closure or wet +12V
	On: short or +12V
	Off: open or 0V
<b>Remote Control</b>	
Interface	Terminal Block of Industrial Standard
Data	RS422 /RS232/RS485
<b>Ethernet</b>	
Port	10/100 Base-T, RJ-45 connector
Work mode	Full duplex/half duplex
Data Rate	10 Mbps & 100 Mbps Ethernet (Auto Adaptive)

**PS:**

### RS422 Data port assignment and pin connections

For data input and output connections, please note the following pin assignment:

<b>Pin Assignment (Screw Terminal Block)</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Data format</b>			
<b>RS422 (3-Wire)</b>	<b>GND</b>	<b>IN/OUT+(A)</b>	<b>IN/OUT-(B)</b>

### 3-Wire RS422 Full Duplex Data communication connection diagram:

Transmitter End			Receiver End		
User's Equipment		DATA PORT (3-PIN)		DATA PORT (3-PIN)	User's Equipment
<b>GND</b>	→	1 GND		1 IN(+)	← TX(+)
<b>IN/OUT+(A)</b>	→	2 IN(-)		2 IN(-)	← TX(-)
<b>RX(+)</b>	←	3 OUT(+)		3 OUT(+)	→ RX(+)