

Pen-sized 3G-SDI Fiber Optical Extender

Features

- Comply with DVB-ASI, SMPTE424M(3G-SDI), SMPTE292M(HD-SDI), and SMPTE259M(C)(SD-SDI) standards;
- Support SDI pathological signal:
- Input cable balance to compensate for the loss of cable transmission;
- Input/output cable transmission distance of up to 80m (BELDEN8281 Copper cable);
- Up to 10km over single mode fiber
- ST Optical interface
- SDI Signal Lock LED
- Aluminium alloy shell
- Plug-in and Play
- Product size 90*17*17mm
- Product net weight (unit: pair) 0.09KG
- Input DC 5V
- Power dissipation < 1.5W per unit
- Operating temperature : -20°C ~75°C



Ordering Information

Part Number	Product Description
PO3GTXR X-PZ	Pen-sized 1 channel forward 3G-SDI Fiber optical extender in pairs, 1310nm, up to 10km on SMF, ST optical connector, with External power adapter Input voltage 100VAC ~ 242VAC, 50-60Hz, output DC 5V

SDI Standard List

Standard	Name	Bit rate	Video format example
SMPTE 259M	SD-SDI	270 Mbit/s, 360 Mbit/s, 143 Mbit/s, and 177 Mbit/s	480i, 576i
SMPTE 292M	HD-SDI	1.485 Gbit/s, and 1.485/1.001 Gbit/s	720p, 1080i
SMPTE 424M	3G-SDI	2.970 Gbit/s, and 2.970/1.001 Gbit/s	1080p

Specifications

Fiber parameter	
Wavelength	1310nm
Rate	3G bps
Transmitter power	> -6db
Receiver sensitivity	> -14db

Fiber connector	ST
Video parameter	
Signal type	DVB -ASI、SD-SDI、 HD-SDI、 3G-SDI
Work standards	DVB-ASI 、 SMPTE259M-C、 SMPTE292M、 SMPTE424M
Bit rates	270 Mbps、 1. 485 Gbps、 2. 97Gbps
Video input/output	
Signal type	1 channel DVB-ASI, SD-SDI, HD-SDI, 3G-SDI digital video
Input impedance	75 Ohm
Enter the automatic cable equalization	>80m (1. 485 Gbps@BELDEN8281 cable)
Clock recovery	When 270 Mbps, 1. 485 Gbps, and 2. 97Gbps are automatic, the others are bypass
Input level	800mVp-p±10%
Enter the echo loss	> 10dB @ 2. 97 Gbps
Output DC offset	<±0. 5V
Output echo loss	> 10dB @ 2. 97 Gbps
The biggest shake	< 0. 1UI(1485Mbps)
Signal overshoot	< 5% (1485Mbps)
Equipment information	
The shell metal	Aluminium alloy
Way to install	Direct plug-in
Product size	90*17*17mm
Product net weight (unit: pair)	0.09KG
Product weight (including the outer packaging)	0.2KG
Packing size	210*160*46mm
Input voltage	100VAC ~ 242VAC, 50-60Hz
Power supply	DC 5V
Power dissipation	< 1.5W
Overload protection	provide
Over current protection	provide
Other parameter	
Operating temperature	-20°C ~75°C
Storage temperature	-40°C ~85°C
Relative humidity	From 5 to 95% (non-condensing)
Working life	> 100,000 hours

Attention:

Lightning Protection, Static Electricity, and Grounding

Prioritize grounding: Thorough grounding is essential to protect your equipment from lightning strikes. Consult with a qualified electrician to implement a robust grounding system tailored to the installation site.

Mitigate static damage: Static electricity can severely damage sensitive optical components and data chips. Always utilize anti-static procedures (e.g., wrist straps) when handling the equipment. Disconnect

power before plugging or unplugging data connections.

Fiber and Optical Component Handling

Extreme care with optical components: The optical components within your optical converter are highly fragile. Avoid any force or pressure that could damage them.

Protect your eyes: The light emitted from optical components can cause eye damage. Never look directly into an active optical port. If you need to measure optical power, always use a calibrated optical power meter.

Equipment Setup and Installation

Optical Fiber Installation:

Verify link suitability: Before connecting any fibers, ensure the link meets all necessary specifications (fiber type, connector type, distance, etc.).

Gentle insertion: Carefully insert the fiber connector into the designated optical port on the device. Avoid excessive force.

Transmitter and Receiver Distinction:

Check device labels: Clearly printed labels on the equipment and its chassis will indicate which device is the transmitter and which is the receiver. Ensure correct connections to avoid signal issues.