12G SDI and RS485 over Fiber Extender Set

ROBOfiber™

RB-12GSDI-485

single 12G SDI channel over fiber with reverse RS485 data

The RB-12GSDI-485 set is designed to forward one 12G SDI video channel supporting UHDTV 4K resolution (2160p@60Hz) over fiber optic, with high fidelity and with an universal, no settings, plug and play approach and provide a return RS485 data channel over same fiber. The optical port is an open SFP slot. Set follows SMPTE ST-2082 and is backwards compatible with all previous lower res SMPTE standards. Has LED indicator for power, fiber link and SDI status of each converter.

Features

- single 4K 12G SDI signal @ 60Hz over fiber
- provides an RS485 data return channel (PTZ)
- Compact metal case design with SDI BNC connector and LC connector single optical port (SFP)
- Runs 10G rate optical link

- No compression, no delay, 4K resolution
- Plug and play design, no settings required
- LED signal for power, fiber and SDI status information
- All metal casing, hardened design for extreme temperature

Specifications

Optical Interface	Connector	single LC/UPC connector (SFP)
	Data rate	optical 10G
	Duplex mode	Forward only
	Fiber	MM 50/125µm, 62.5/125µm or SM 9/125µm
	Distance	10Km over SMF, 500m over MMF
	Wavelength	1270/1330nm
Electrical Interface	Connector	BNC male for SDI and SDI loop
	Impedance	75Ohms
	Formats supported	SMPTE ST-2082 12G-SDI 2160P60Hz
		SMPTE ST-2081 6G-SDI 2160P30Hz
		SMPTE 424M 3G-SDI 1080P30Hz
		SMPTE 292M HD SDI 1080i, 720P
		SMPTE 344M ED SDI 480P, 576P
		SMPTE 259M SD SDI 480i, 576i
	Cable max. distance	75m@12G, 120m@6G, 200m@3G
		300m@1.5G, 600m@270M
	Signal amplitude	800mV +/- 10%
	RS-485	2-wire green block

Standards	SMPTE ST-2082 and backwards compatible SMPTE
Indicators	LED (Power/Fiber Link/HDMI signal)
Power Input	Adapter Type: DC 5V/1A, USB-C power jack
	Power Input : AC 100 ~ 240V, 50-60Hz
	Power plug: US 2 blade, type A connector
Power Consumption	< 2W
Dimensions (D x W x H)	120 x 100 x 25mm (adapter not included)
Weight	Adapter : 50g
	Converter : 140g
Temperature	-20 ~ 70°C (Operating), -40 ~ 85°C (Storage)
Humidity	10 ~ 90% non-condensing
Certifications	CE, FCC
MTBF	95,000 hrs

Application

Video Input

Video Output

Monitor

RB-12GSDI-485

Fiber Link

RB-12GSDI-485

PTZ controls

Camera with PTZ

Ordering Information

Model Name	Description
RB-12GSDI-485	12G SDI forward channel with 2wire RS485 return data to fiber extender set, single LC conn, AC ad. included

www.robofiber.com
sales@robofiber.com