

Professional 12G SDI Optical Transceiver

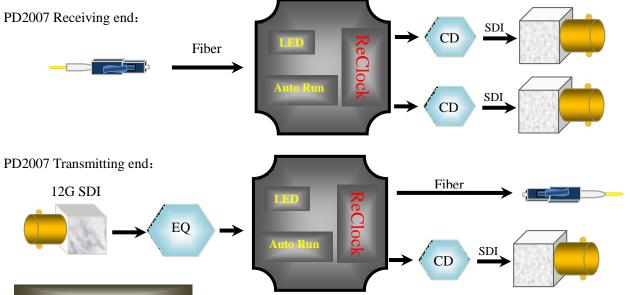
PD2007 (12G SDI 光端机)

Version:1.0





Functional Diagram



Product Introduction

DeviceWel1 Professional 12G SDI optical transceiver, optical signal transmission system based on broadcast SDI signal design. The device supports up to 12G SDI signals and is backward compatible with 6G SDI, 3G SDI, 1.5G SDI and 270M SDI signals. The device has built-in signal equalization, serial clock recovery and line drive. The equipment is used in pairs, and the input and output of optical fiber and SDI can be customized by controlling the DIP switch. The receiving end supports the conversion of 1 optical signal input into 2 independent SDI signal outputs. The transmitting end supports one SDI signal input, which is converted into one optical fiber output and one loop-out. The device adopts a detachable SFP optical module and a single-mode single-fiber design. The standard transmission distance is 20KM. The corresponding modules of different distances can be arbitrarily changed according to different application scenarios. The device's SDI input signal frequency is automatically adapted to automatically detect 12G/6G/3G/HD/SD-SDI signals, which can be applied to professional SDI video signals such as UHDTV/FHDTV/HDTV/SDTV, especially for broadcast-grade ultra-high definition digital. Long-distance fiber transmission and application of signals.

The device is powered by MicroUSB and can be used in USB device power supply systems.

Features

Receiving end:

- ◆ 1-CH optical signal input
- ◆ 2-CH 12G SDI signal output
- ◆ Universal LC fiber interface
- ◆Supports up to 12G SDI, backward compatible
- ◆ Input and output resolution adaptive
- ◆ Support Micro USB power supply
- ◆ Single / multimode fiber transmission
- ◆ Self-adapted 12G and below
- ◆ Built-in clock recovery function
- ♦ Special features can be customized

Transmitting end:

- ◆ 1-CH 12G SDI signal input
- ◆ 1-CH 12G SDI signal output
- ◆ 1-CH serial digital fiber signal output
- ◆ Universal LC fiber interface
- ◆ Supports up to 12G SDI, backward compatible
- ◆ Input and output resolution adaptive
- ◆ Support Micro USB power supply
- ◆ Single / multimode fiber transmission
- ◆ Self-adapted 12G and below
- ◆ Clock recovery function
- ♦ Special features can be customized

Interface Description



Receiving end:

NO.	Function	NO.	Function	
1	SDI OUT	2	SDI OUT	
3	DIP control	4	FIBER IN	
5	Micro USB power supply			



Transmitting end:

NO.	Function	NO.	Function	
1	SDI IN	2	SDI OUT	
3	DIP control	4	FIBER OUT	
5	Micro USB power supply			

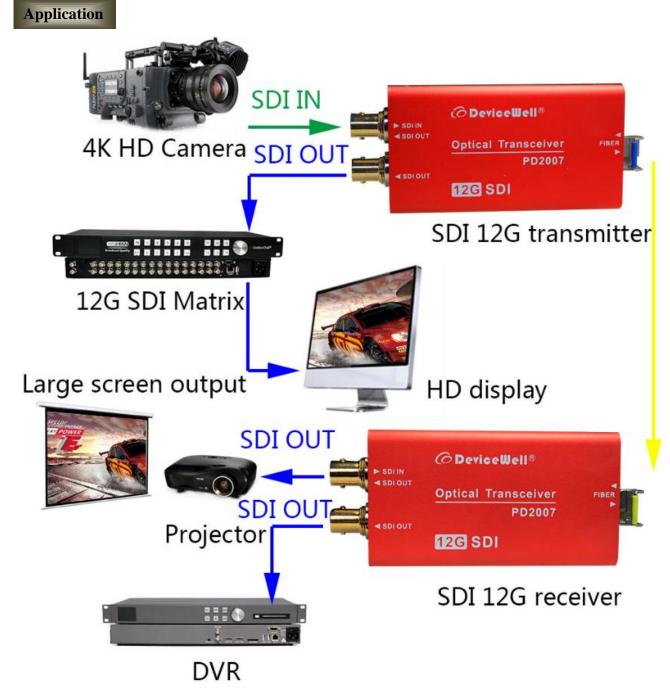
Product Parameters

Name	SDI HD Video Optical Transceiver			
	Input signal	SDI Signal		
CDI Video Invest	Rate	100MHZ~12GHZ		
SDI Video Input	Signal amplitude	800mV ±10%		
	Connector	BNC complies with IEC169-8		
	Input signal	Optic Signal		
Optical Signal	Rate	100MHZ~12GHZ		
Input	Connector	Standard LC		
	Impedance	100Ω		
	Output signal	2-CH SDI Signal		
SDI Video	Rate	100MHZ~12GHZ		
	Signal amplitude	800mV ±10%		
Output	Connector	BNCcomplies with IEC169-8		
	Impedance	75Ω		
	Output signal	Optical signal		
Optical Signal	Rate	100MHZ~12GHZ		
Output	Connector	Standard LC		
	Impedance	100Ω		
	Power supply	DC 5V		
	Size	110*46*27mm		
	Control panel	NO		
Comoral	Weight	0.16 KG		
General Parameters	Operating temperature	0°C~50°C No condensation		
	Storage temperature	-20°C ~75°C		
	Working humidity	20%~70%RH		
	Storage humidity	0%~90%RH, No condensation		

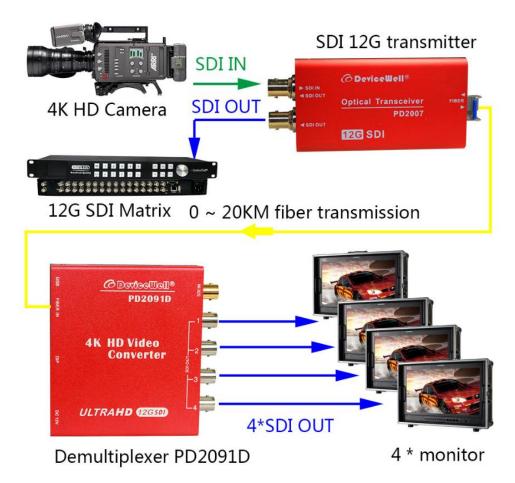
Parameters Setting



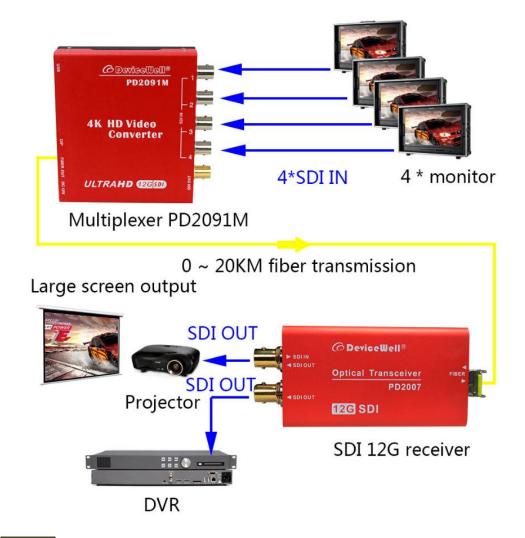
DIP		Function	
1	2	runction	
ON	ON	Reserved	
OFF	OFF	Transmitting end	
ON	OFF	Receiving end	
OFF	ON	Reserved	



transmitter with 12G demultiplexer, more powerful.



receiver with 12G multiplexer, more powerful.



Size

