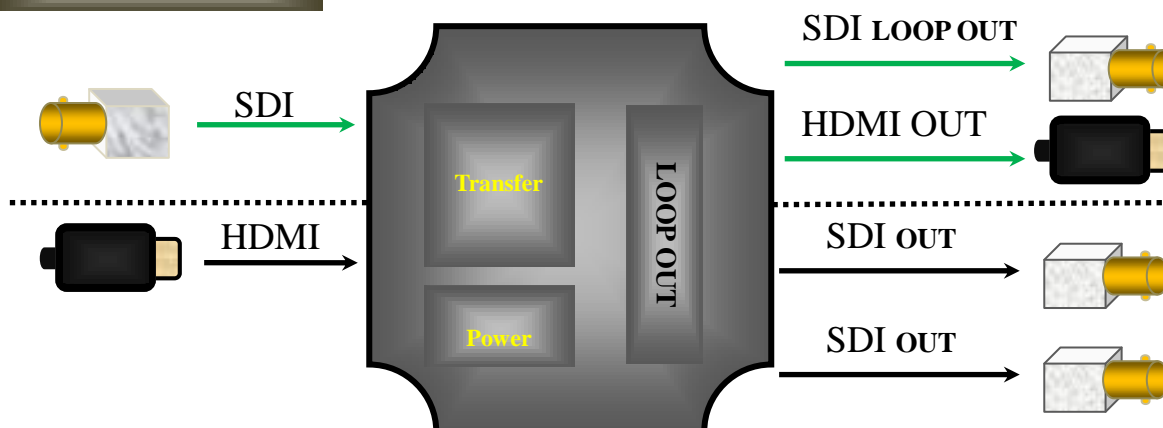


## PD2003 (SDI/HDMI BIDI Converter)

Version:1.0



### Functional Diagram



### Product Introduction

DeviceWell 12G HD video SDI/HDMI bidirectional converter PD2003, 4K level signal conversion equipment based on broadcast 12G SDI signal. The device input supports up to 12G SDI signals, and is compatible with 6G SDI signals and single-link signals below 3G. The PD2003 product supports SDI to HDMI and HDMI to SDI function converters. Support audio de-embedding function, can output audio through 3.5mm headphone jack. The highest resolution supports the 3840X2160P60 and is backward compatible; the dual power supply system provides DC12V and USB5V DC power.

The device is equipped with a Micro USB interface. Users can obtain status or upgrade software through the USB interface. The Micro usb interface is also used for power supply of the device. It can be applied to USB mobile device power supply systems such as power bank. In addition, the equipment is equipped with 1/4 hot shoe screw hole, which is convenient for professional users to fix equipment.

- ◆ Support 1-CH SDI to 1-CH HDMI output with 1-CH SDI loop out
- ◆ Support 1-CH HDMI to 2-CH SDI output
- ◆ Support 1-CH SDI audio de-embedding output and 1-CH HDMI audio de-embedding output
- ◆ Input and output resolution adaptive, up to 12G/4K60
- ◆ DC12V power supply system
- ◆ Support fiber input
- ◆ Built-in clock recovery function
- ◇ Special features can be customized



No.	Function	No.	Function
1	Fiber Input	2	SDI Input
3	SDI Loop	4	2*SDI Output
5	USB	6	Audio embedding
7	DIP	8	HDMI Input
9	HDMI Output	10	Audio De-embedding
11	DC12V Power Input		

**Note:** SDI to HDMI: Interface 2 IN, 9 OUT, 3 LOOP

HDMI to SDI: Interface 8 IN, 4 OUT

### SDI to HDMI Function Description

The PD2003 board supports SDI to HDMI straight-through output and supports 1-CH SDI loop function; SDI input supports 12G/6G/3G/HD/SD signals, and SDI audio is de-embedded; audio is input through interface 6, and HDMI passes through interface 9. Output, interface 3 supports SDI loop function, and interface 10 is audio de-embedding output.

The SDI input signals are supported as follows:

12G
6G
3G
HD
SD

**Note:** The current SDI to HDMI DEMO function SDI input only support 12G signal, resolution 3840X2160P60.

### HDMI to SDI Function Description

The PD2003 board supports HDMI to SDI pass-through output and supports 2-CH SDI output function. The HDMI input supports 4K/1080P/720P and standard definition signals, and HDMI audio is de-embedded; HDMI is input through interface 8, SDI is output through interface 4, and interface 10 is audio de-embedded output.

The HDMI input signal is supported as follows:

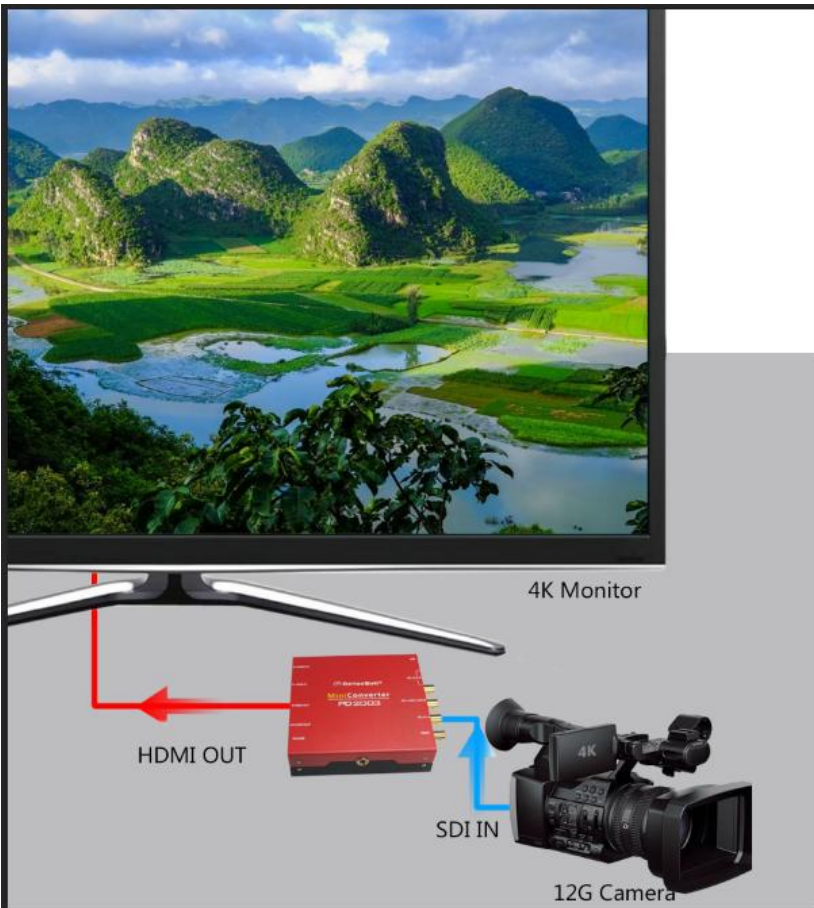
UHD (3840X2160)
HD
SD

**Note:** The current HDMI to SDI DEMO function HDMI input resolution only support 3840X2160P60

Name	SDI/HDMI BIDI Converter	
Model	PD2003	
SDI Signal Input	Input signal	1.5G/3G/6G/12G signal
	Rate	270Mbps~12Gbps
	Connector	BNC comply IEC169-8 standard
	Impedance	75Ω
HDMI Signal Input	Output signal	HDMI video signal
	Connector	HDMI
	Signal amplitude	800mV±10%(100Ω)
	Impedance	100Ω
Signal output	Output signal	1.5G/3G/6G/12G signal
	Rate	270Mbps~12Gbps
	Signal amplitude	800mV±10%
	Connector	BNC comply IEC169-8 standard
	Impedance	75Ω
Common Parameters	Power	DC 5V
	Size	131*111.5*33mm
	Control panel	No
	Working temperature	0°C~50°C no condensation
	Storage temperature	-20°C~75°C
	Work humidity	20%~70%RH
	Storage humidity	0%~90%RH, no condensation

NO

## Application



NO. 1 SDI IN HDMI OUT



NO. 2 SDI IN SDI LOOP



NO. 3 HDMI IN 2\*SDI OUT

# Size

