

# HDMI/DVI to HDSDI/SDI Video Converter



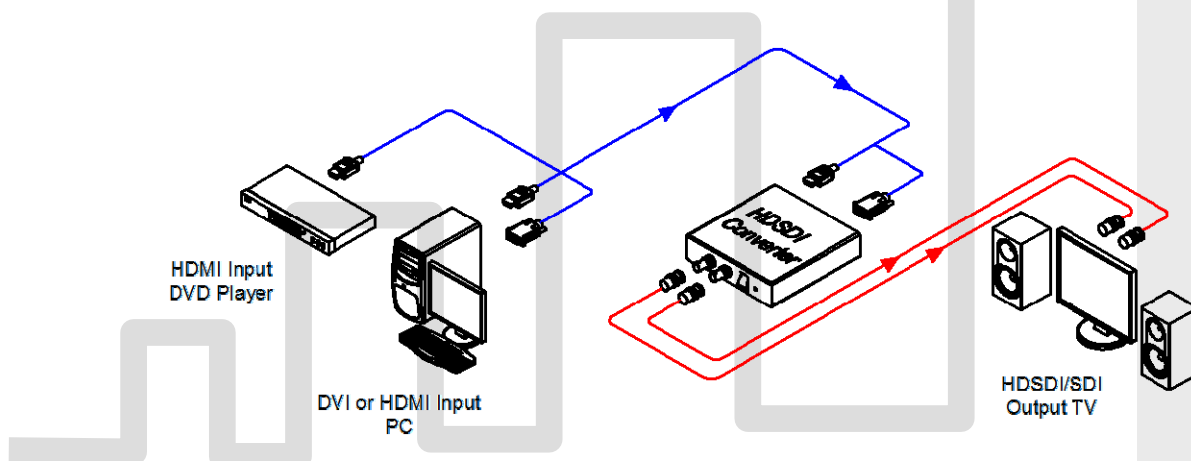
## Descriptions

Opticis' HDMI/DVI to HDSDI/SDI converter, ODSG-01-HS converts high resolution HDMI or DVI sources to a SMPTE standard HD or HD-SDI signal for broadcasting on air or integrating into a professional video production system. The resolutions up to 1080p or UXGA (1,600x1200) are supported over the HDSDI link.

HDMI or DVI devices are connected to the HDMI or DVI input and HDSDI/SDI devices are connected to the SDI output. When the source, display and the converter are powered and connected, video signals are converted to the proper format.

## Key Features

- ◆ Converts HDMI or DVI to HD-SDI/SD with embedded audio and time code.
- ◆ 8/10/12bit resolution for greater precision and dynamic range.
- ◆ Supports RGB 4:4:4, YCbCr 4:4:4 or YCbCr 4:2:2 HDMI/DVI input video format.
- ◆ Offers firmware updates through PS2 port.
- ◆ Performs fully digitized conversion without A/D or D/A converting.
- ◆ Includes HDMI and DVI input female connectors and two BNC output receptacles.
- ◆ Provides status indicators showing connection.
- ◆ Supports I2S, 48 kHz audio input formats.



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## Supported Input/Output Resolutions

VIDEO INPUT DATA FORMAT		
Input Data Format	RGB(4:4:4), YCbCr(4:4:4), YCbCr(4:2:2)	
Color Depth	8/10/12 bits	
Input Signal Resolution	SMPTE-274M	1080i (60/59.94/50)
	SMPTE-296M	1080p (25/24/23.976)
	SMPTE-260M	720p(60/59.94/50)
	SMPTE-125M	480i (59.94)
	ITU-R BT.656	576i (50)
AUDIO INPUT DATA FORMAT		
Input Data Format	I2S	
Sampling Rate	48 kHz	
Input Channel	2 channels	

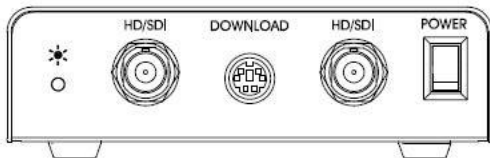
## Recommended Operating Conditions

Parameter	Symbol	Min.	Typ.	Max.	Units
Operating Temp.	T <sub>A</sub>	10	25	+ 40	°C
Storage Temp.	T <sub>s</sub>	-25		+ 60	°C
Storage Humidity	H <sub>s</sub>	5		95	RH%

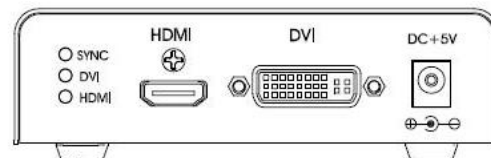
## Specifications

Data rates and Resolution	
Input Video Bandwidth	1.65 Gbps
Output Video Bandwidth	1.485 Gbps
Maximum Input Resolution	1600x1200, 1920x1080p
Maximum Output Resolution	1920x1080p
Mechanical Specifications	
DVI Connector	DVI-I 29 pin female (Digital only)
HDMI Connector	HDMI female
HDSDI/SDI Connector	BNC female
Firmware Download Port	PS2 female
Power	+5V DC Toggle switch ON/OFF
Dimensions	117x105x33 mm

## Panel Descriptions



- Power switch
- Power indicator LED
- PS2 port for firmware update
- HDSDI output port



- Status indicator LED
  - 1) Video sync detection LED
  - 2) DVI input connection status LED
  - 3) HDMI input connection status LED
- HDMI input port
- DVI input port
- 5V power jack



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**All contents are subject to be changed without prior notice.**