

HDMI to Optical and Electrical 3G/HD/SD SDI Converter

Convert HDMI to HD or SD SDI with the BrightEye 83-F. Convenient for broadcast video cameras and other sources with an HDMI output. BrightEye 83-F presents both electrical and optical serial digital outputs.

The optical output can drive single mode fiber to a distance of 20 kilometers. With an optical launch power attenuator, multi-mode fiber can also be used.

BrightEye 83-F is for use with standard definition video signals and 3 Gb/s and 1.5 Gb/s high definition signals.

Signal monitoring and control is provided through the included BrightEye Mac and BrightEye PC software.

In compliance with the licensing restrictions on HDCP encrypted material, BrightEye 83-F cannot convert encrypted signals to SDI form.

Features

- **HDMI to optical and electrical converter**
- **Use with cameras and other sources that have an HDMI output**
- **Passes embedded audio**



Input

Number	One
Type	HDMI 1.3
Format	Supports HDMI signals which map to the video standards listed below

SDI Standards Supported

1080i (SMPTE 274M -4,5,6) 50, 59.94 or 60 Hz
 720p (SMPTE 296M -1,2,3) 50, 59.94 or 60 Hz
 1080p (SMPTE 274M -9,10,11) 23.98, 24, 25 Hz
 1080sF (RP211 -14,15,16) 23.98, 24, 25 Hz
 1080p (SMPTE 424M, 425M), 50, 59.94, 60, Level A
 525i, 625i (SMPTE 259M)

Serial Digital Output

Number	Two, BNC
Signal Type	Follows input
Impedance	75 Ω
Return Loss	> 15 dB to 1.485 GHz > 10 dB to 2.97 GHz
Output DC	None (AC coupled)

Optical Output (BE83-F Only)

Number	One, LC/UPC
Type	Follows input
Wavelength	1310 nm (non-CWDM) Wavelengths 170 nm – 1610 nm at 20 nm CWDM spacing available. Call factory for price and specify part number BE83-F-SP.
Power	-7 dBm
Max Cable Length	20 km (For greater distances, or higher power and larger loss budgets, please contact the factory)
Fiber Type	Single Mode Multi-mode compatible with attenuation at transmit end

General Specifications

Size	5.63" W x 0.8" H x 5.98" D (143 mm x 21 mm x 152 mm) including connectors and flange
Power	12 volts, 5 watts (100-230 VAC modular power supply)
Temperature Range	0 to 40° C ambient (all specs met)
Relative Humidity	0 to 95° non-condensing
Altitude	0 to 10,000 ft.