BrightEye 46

3G / HD / SD / ASI Electrical to Optical Converter

BrightEye 46 is an electrical to optical converter and distribution amplifier that can be used with standard definition video signals, 3 Gb/s and 1.5 Gb/s high definition signals, or ASI signals. The video input is reclocked and presented on four BNCs and is also converted to an optical signal and presented on an optical LC connector. This 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 with BrightEyes.

This is a simple device with no USB port and no interface to BrightEye Mac or PC software. Front panel indicators show the presence of an input signal and power.

▶ Optical Transmitter

▶ Electrical to Optical Converter

▶ Use with HD or SD signals

▶ Use with ASI Signals

▶ 3G HD, Level A or Level B supported

▶ Serves as a Distribution Amplifier

▶ Passes Embedded Audio

ENSEMBLE
D E S I G N S

▶Specifications

Serial Digital Input

Number	One
Signal Type	270 Mb/s SD Serial Digital (SMPTE 259M)
	1.485 Gb/s HD Serial Digital (SMPTE 274M, 292M or 296M)
	2.97 Gb/s HD Serial Digital (SMPTE 424M, 425M)
Impedance	75 Ω
Return Loss	>15 dB to 1.485 GHz
	>10 dB to 2.97 GHz
Max Cable Length	300 meters for 270 Mb/s
	100 meters for 1.485 Gb/s
	70 meters for 2.97 Gb/s
	(Belden 1694A)

Automatic Input Cable Equalization

Serial Digital Output

Number	Four
Signal Type	3G/HD/SD/ASI Serial Digital 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

Number	One
Type	SD and ASI (SMPTE 297M, optical equivalent of 259M)
	1.485 Gb/s HD (SMPTE 274M, 292M or 296M)
	2.97 Gb/s HD (SMPTE 424M, 425M)
Wavelength	1310 nm (1550 by special order)
Power	-7 dBm
Max Cable Length	20 km
Fiber Type	Single Mode
	Multi-mode compatible with 8 dB attenuation at transmit end
Connector	LC/UPC

General Specifications

Size	5.625" W x 0.8" H x 5.5" D (143 mm x 20 mm x 140 mm) including connectors
Power	12 volts, 7 watts (100-230 VAC modular power supply not included)
Temperature Range	0 to 40° C ambient
Relative Humidity	0 to 95° non-condensing

ENSEMBLE DESIGNS