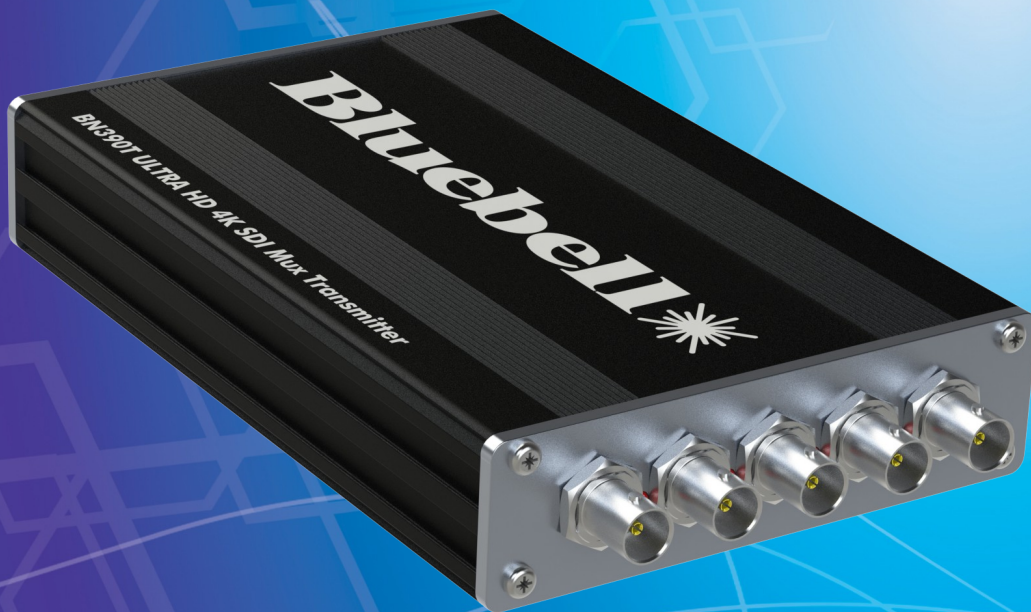# Bluebell ✷

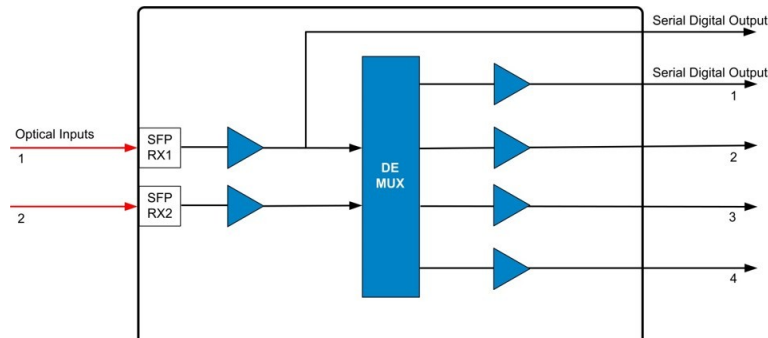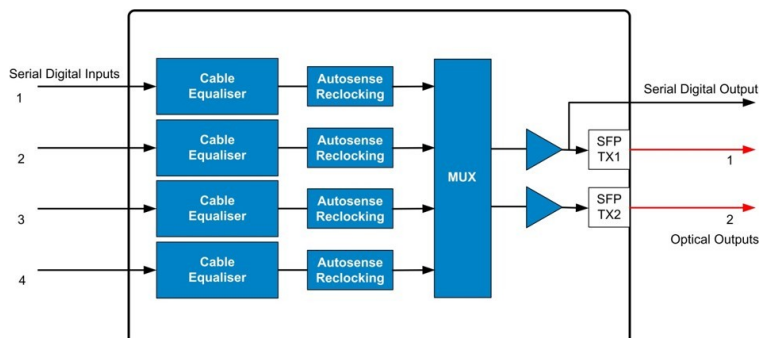## Deployable Optical Products for Outside Broadcast

BN390

12G-SDI, 4K-UHD, 6G-SDI, 3G-SDI, HD-SDI

Expanding upon the successful BlueNano range the BN390 is designed for the cost effective transport of 4K UHD signals over fibre. Based around field proven technology the compact units provide the transport of 4 x 3G-SDI signals on a single Wavelength on a Single Fibre.

The BN390 also provides a compact conversion unit which allows the outputs from up to four cameras to be transmitted over fibre. This unit multiplexese 4 x 3G-SDI onto one 12G-SDI Signal with Electrical and Optical Outputs. With an option for ITU Grid CWDM Wavelengths, up to 18 x 12G-SDI channels or indeed 72 x 3G-SDI channels can be transported on a single Singlemode fibre.

Power is provided via the compact PS12 unit. Each BN390 has a 4 pin XLR allowing power from a variety of external DC sources in the range 4.5 to 17 V.

www.bluebell.tv

Specifications for each channel

Electrical Input

Standards	SMPTE 424M, SMPTE 292M
	SMPTE 297M
Equalisation	Automatic to 100 m @ 3 Gb/s
	Automatic to 200 m @ 1.485 Gb/s
Connector	1 x 75 Ohm BNC to IEC 60169-8 Amendment 2 per channel
Return Loss	> 15 dB @ 1.485 Gb/s
Format	Reclocked

Optical Output

Connector	Neutrik Opticalcon Dual
Wavelength	1270-1610 nm
Optical Power	-3 dBm @ 1310 nm (typical)

Optical Input

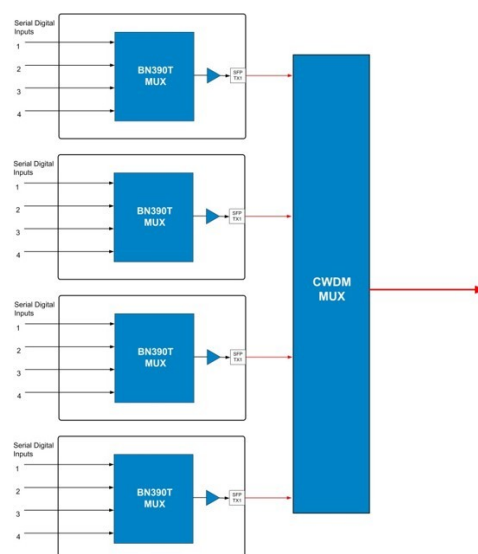|	
Connector	Neutrik Opticalcon Dual
Wavelength	1270-1610 nm
Sensitivity	> -22 dBm @ 3 Gb/s (typical)
Max I/P power	> -1 dBm

Electrical Output

Standards	SMPTE 424M, SMPTE 292M, SMPTE 297M Automatic rate selection for 3G-SDI, HD-SDI data rates.
Connector	1 x 75 Ohm BNC to IEC 60169-8 Amendment 2 per channel
Return Loss	> 15 dB @ 1.485 Gb/s
Signal Level	800 mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.15 UI line equalised
Format	Reclocked

General specifications (excluding connectors)

Length	134 mm
Width	109 mm
Height	30 mm
Weight	200 g
Operating Temp	-30 to +70 ^{0}C
Power	2.5 W
Voltage	4.5 to 17 V dc

Conformance

EMI/RFI:	Complies with 89/336/EEC, EN55022B, EN61000-4-2, EN61000-4-4-(Level 2), EN61000-4-4FTB, EN61000-4-5, EN61000-4-11
Electrical:	Complies with EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
Laser Safety:	Dependent on SFP fitted. Complies with Class 1 laser product
RoHS:	Complies with Directive 2002/95/EC
Warranty	5 years

Ordering Information

Contact Your local Distributor