

# Bluebell

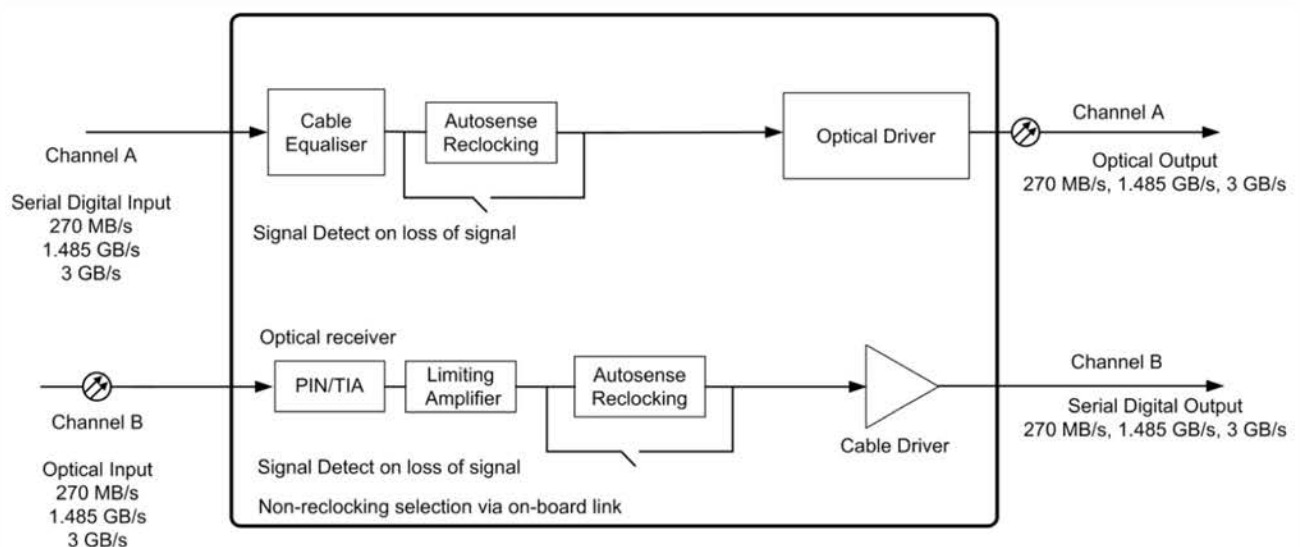
## BC Series Modular Fibre Optic Interface System



### BC323TR Electrical to Optical Transceiver 3G-SDI, HD-SDI, SD-SDI, ASI

The BC323TR is a transceiver module for the conversion of two independent 3G-SDI, HD-SDI, SD-SDI and ASI signals into fibre optical cable. Each incoming signal is auto-sensed and then equalised and reclocked prior to conversion and transmission down a separate single optical fibre. Each BC323TR is housed in a compact robust enclosure and is designed for Outside Broadcast and special events as well as Studios. Power is provided via the optional PS12 unit supplied separately. The PS12 has an IEC mains inlet allowing easy adoption into standard equipment bays. The BC323TR has a 4 pin XLR allowing power from a variety of external DC sources in the range 4.5 to 17 V. The BC323TRs are extremely compact dual channel fibre optic converters that are perfectly suited to provide interference free transmission and for extending the range of electrical signals, particularly HD-SDI and 3G-SDI signals. Each channel can operate in non-reclocking mode and handles data rates from 50 Mb/s to 3 Gb/s.

The BC323TR is available in singlemode, WDM and CWDM variants to suit any fibre application. The BC323TR can also be used to interface to any of the standard Bluebell cards and enclosures.



## Electrical Input

Standards	SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M, DVB-ASI
Equalisation	Automatic to 100 m @ 3 Gb/s Automatic to 200 m @ 1.485 Gb/s Automatic to 300 m @ 270 Mb/s Equaliser and reclocking can be bypassed to support data rates down to 50 Mb/s
Connector	1 x 75 Ohm BNC per IEC 60169-8 Amendment 2 per channel
Return Loss	> 15 dB @ 1.485 Gb/s
Format	Reclocked (with bypass to support data rates down to 50 Mb/s)

## Electrical Output

Standards	SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M, DVB-ASI Automatic rate selection for 3G-SDI, HD-SDI and SD-SDI data rates.
Connector	1 x 75 Ohm BNC per IEC 60169-8 Amendment 2
Return Loss	> 15 dB @ 1.485 Gb/s
Polarity	1 x Non inverting, 1 x inverting output
Signal Level	800 mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.15 UI line equalised
Format	Reclocked (with bypass to support data rates down to 50 Mb/s)

## Optical Output

Connector	1 x female LC as standard per channel
Wavelength	1310 nm, 1550 nm See Ordering Information
Optical Power	-2 dBm @ 1310 nm (typical) -2 dBm @ 1510 nm (typical) 0 dBm @ CWDM (typical)

## General module specifications

Length	92 mm
Width	64 mm
Height	30 mm Excluding connectors
Weight	100 g
Operating Temp	-30 to +70 °C
Power	2 W
Voltage	4.5 to 17 V dc
Signal detect	LED on for loss of signal

## Conformance

EMI/RFI	Complies with 89/336/EEC
Electrical	Complies with EN 61000-6-1, EN61000-6-2
Laser Safety	Complies with Class 1 laser product 24 CFR 1040.10 & 1040.11
RoHS	Complies with Directive 2002/95/EC
Warranty	5 years

## Ordering Information

BC323TR/M	Multimode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transceiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (850nm). Fitted with LC connectors. PS12 power supply ordered separately.
BC323TR/S/13	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transceiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1310nm). Fitted with LC connectors. PS12 power supply ordered separately.
BC323TR/S/15	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transceiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1550nm). Fitted with LC connectors. PS12 power supply ordered separately.
BC323TR/S/CWDM	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transceiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. (Dedicated CWDM Tuned Laser, Wavelength to suit ITU Grid Spacing - see CWDM Ordering Matrix). LC connectors as standard. PS12 power supply ordered separately. Each module has a transmitter at the specified wavelength and a separate wideband receiver.
PS12	10 watt Plugtop PSU for the BC313/323/550 Product Range. Fitted with 4 pin XLR. Voltage range 100-240 V ac 50/60 Hz