

Bluebell

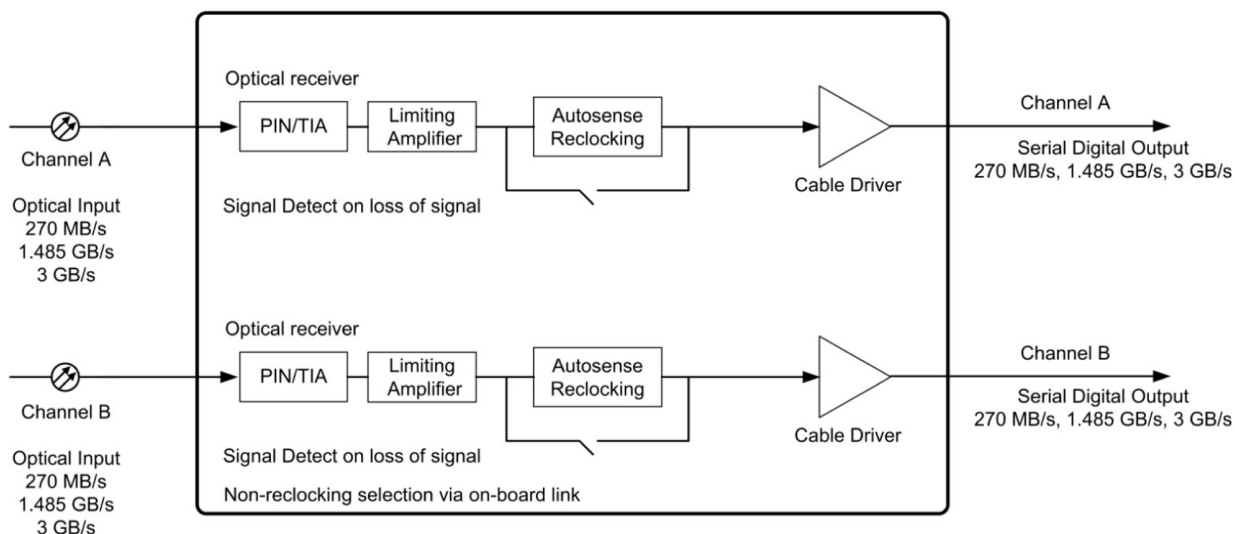
BC Series Modular Fibre Optic Interface System



The BC323R is a receiver for the conversion of two independent optical signals into electrical 3G-SDI, HD-SDI, SD-SDI and ASI. The incoming optical signal is fed to a trans-impedance and limiting amplifier before being electrically reclocked on the outputs. Each BC323R 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 PS12 unit supplied separately. The PS12 has an IEC mains inlet allowing easy adoption into standard equipment bays. The BC323R has a 4 pin XLR allowing power from a variety of external DC sources in the range 4.5 to 17 V. The BC323s 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 BC323R is available in singlemode, WDM and CWDM variants to suit any fibre application. The BC323R can also be used to interface to any of the standard Bluebell cards and enclosures.

BC323R Dual Optical to Electrical Receiver 3G-SDI, HD-SDI, SD-SDI, ASI



Optical Input

Connector	1 x female LC as standard per channel See Ordering Information
Wavelength	1270-1610 nm See Ordering Information for multimode and singlemode variants
Sensitivity	> -25.0 dBm @ 3 Gb/s > -25.5 dBm @ 1.485 Mb/s > -26.0 dBm @ 270 Mb/s
Max I/P power	>-1dBm
Data rate	50 Mb/s to 3 Gb/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 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 (with bypass to support data rates down to 50 Mb/s)

General module specifications

Length	92 mm 142mm Extended enclosure
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

BC323R/M	Multimode Dual Channel 3G/SDI, HD/SDI Fibre Optic Receiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors. PS12 power supply ordered separately.
BC323R/S	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Receiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors. PS12 power supply ordered separately.
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

The BC323 can also be supplied in an “extended” enclosure with ST connectors — add /ST to the end of the part numbers above.