Bluebell

BC Series Modular Fibre Optic Interface System

BC362R Dual Optical to Electrical Receiver   3G-SDI, HD-SDI, SD-SDI, ASI
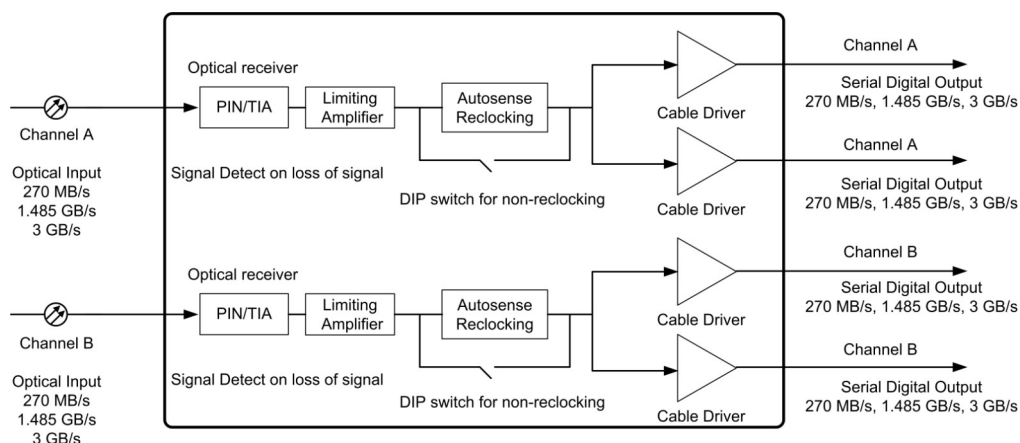
The BC362R is a receiver for the conversion of two independent optical signals into electrical 3G-SDI, HD-SDI, SD-SDI and ASI. The incoming optical signal is fed to a trans-impedance and limiting amplifier before being electrically reclocked on the outputs. All Bluebell cards are designed to retain maximum integrity of the signal path offering excellent jitter free optical transport.

Two serial digital signals are available on each output. The BC362R is available in multimode, singlemode, WDM and CWDM variants to suit any fibre application.

The BC362R occupies a single slot in the BC100-3RU 19" rack-mounting frame which can hold up to 15 single slot cards. Some BC Series processing cards have dual functionality allowing up to 30 channels of video to be transmitted or received from a single 3RU frame.
Signal and card monitoring is achieved through SNMP monitoring in the BM101 network card.
Alternatively GP-Output alarms can be triggered via the BM100 module.

For stand alone applications the BC362R can be housed in an individual rugged enclosure.

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Schematic Diagram BC362R

Rear Panel

Specifications for each channel

Optical Input

Connector	1 x female LC as standard per channel
	See Ordering Information
Wavelength	1260-1620 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	> -1 dBm
Data rate	50 Mb/s to 3 Gb/s

Electrical Output

Standards	SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE297M, DVB-ASI
	Automatic rate selection for 3G-SDI, HD-SDI and SD-SDI data rates.
Connector	2 x 75 Ohm BNC per IEC 60169-8 Amendment 2
Return Loss	> 15 dB @ 1.485 Gb/s
Polarity	2 x Non inverting
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 10 Mb/s)

General card specifications

Depth	60 mm
Width	20 mm 4TE
Height	127 mm (3RU)
Weight	100 g
Operating Temp	-30 to +70 ^{0}C
Power	3 W
Signal detect	LED on for loss of signal
No. of slots	1

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

BC362R/S	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Receiver Card, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors.
BC362R/M	Multimode Dual Channel 3G/SDI Fibre Optic Receiver Card, Auto-Sensing and reclocking for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors.

Universal Chassis and Power Supplies

BC100-3RU	19" 3RU Chassis for up to 15 BCxxx Cards with optional Network Monitoring and facility for Dual Redundant Power Supplies (not supplied).
BC100-3RU/48V	19" 3RU Chassis for up to 15 BCxxx Cards with optional Network Monitoring and facility for Dual Redundant Power Supplies (not supplied). Fitted with 48V dc input.
BM100	Network Monitoring Card with GPI Output on a SCSI Connector for Slot-16
BM101	Network Monitoring Card with Ethernet connection for Slot-16
BC140	Extender Card for BC100 3RU Chassis
PS65	90-250VAC Power Supply for BC100-3RU or BB100-3RU Chassis
BC160	19" 1RU Chassis for up to 6 BCxxx Cards. Includes Dual Redundant Power Supplies.
BC110	Single Slot Chassis with Universal Mains Power Supply
BC120	Triple Slot Chassis with Universal Mains Power Supply

RoHS Compliant
Directive 2005/95/EC

CE