

## BC Series Modular Fibre Optic Interface System



### BC501R Single Channel Optical to Electrical Converter

### AV and 2 x Audio

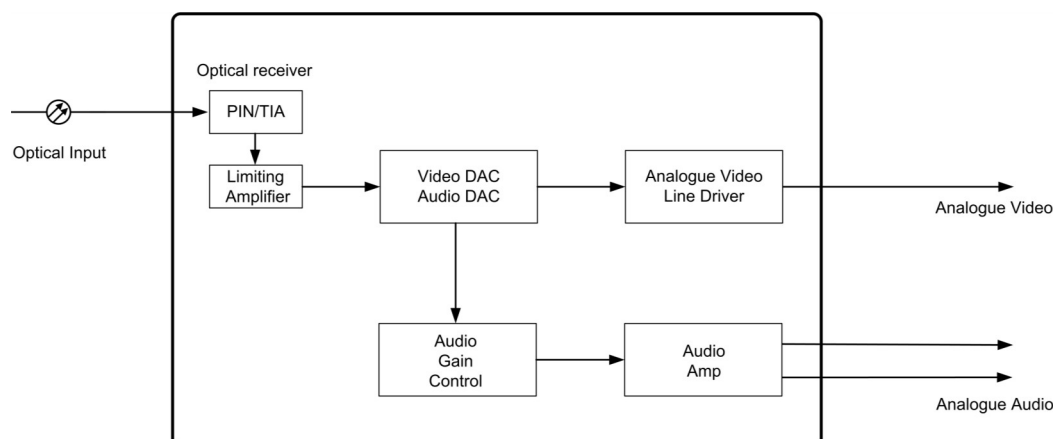
The BC501R is a receiver for the conversion of optical signals into composite analogue video and two analogue audio channels. The incoming optical signal is fed to a trans-impedance and limiting amplifier before Digital to Analogue conversion and being fed to a video line driver. The two separate audio channels are amplified and presented to the rear panel. The card does not rely on a video signal for transmission and can be used as an audio only transmission system. All Bluebell cards are designed to retain maximum integrity of the signal path offering excellent jitter free optical transport.

The BC501R is available in multimode, singlemode, WDM and CWDM variants to suit any fibre application. The BC501 will also pass tri-level syncs, VITS, SIS, teletext data and Timecode. The BC501 can be used with a standard optical splitter to distribute syncs and Timecode optically within a facility.

The BC501R 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 BM102 network card.

For stand alone applications the BC501R can be housed in an individual rugged enclosure.

## Schematic Diagram BC501R



## Rear Panel



## Specifications

## Optical Input

Connector	1 x female LC/PC via SFP Module
Wavelength	See Ordering Information
Wavelength	Wideband Receiver 1260 nm to 1610 nm
Sensitivity	See Ordering Information
Max I/P power	> -3 dB to -30 dB (Typical, SFP Dependent)
	> -1 dBm (Typical, SFP Dependent)

## Electrical Output Video

Standards	Composite 1V pk-pk PAL, NTSC, SECAM
Connector	75 Ohm BNC
Diff. Phase	< 1°
Diff. Gain	< 1% (at sub-carrier 3.58/4.43 MHz)

## Electrical Output Audio

Format	2 x Balanced Line Level Analogue Audio
Connector	1 x D9 Female
Format	20 Hz to 20 kHz
	+/-0.25 dB
	0 dB system gain
	18dBu ref. 1 mW into 600R adjustable
Impedance	< 50 Ohm

## General card specifications

Depth	86 mm <sup>1</sup>
Width	20 mm 4HP
Height	129 mm 3RU
Weight	100 g
Operating Temp	-30 to +70 °C
Power	2.4 W
No. of slots	1

<sup>1</sup> (including connectors)

## 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

BC501R/M	Multimode Composite Video + 2 x Balanced Line Level Analogue Audio Receiver Card
BC501R/S	Singlemode Composite Video + 2 x Balanced Line Level Analogue Audio Receiver Card

Fitted with LC connectors as standard

For all available enclosures and frames see section "Universal Chassis and Power Supplies".