

BC Series Modular Fibre Optic Interface System



BC501T Single Channel Electrical to Optical Converter

AV + 2 x Audio

The BC501T is a transmitter for the conversion of composite analogue video and two analogue audio channels into fibre optical cable. The incoming video signal is clamped and converted to digital before transmission down a single optical fibre. Two separate audio channels are also filtered and converted to digital before being presented to the optical driver. 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.

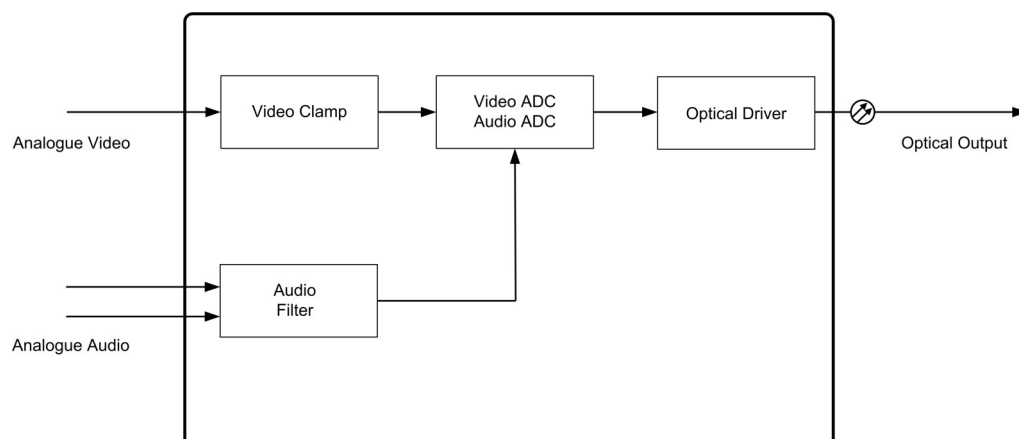
The BC501 will also pass tri-level syncs, VITS, SIS, teletext data and Timecode. The BC501 can be used with a standard optical splitter to distribute syncs and Timecode optically within a facility.

The BC501T is available in multimode, singlemode, WDM and CWDM variants to suit any fibre application.

The BC501T 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 BC501T can be housed in an individual rugged enclosure.

Schematic Diagram BC501T



Rear Panel



Specifications

Electrical Input 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 Input 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 100 kOhm

Optical Output

Connector	1 x female LC/PC via SFP Module
	See Ordering Information
Wavelength	1310 nm, 1550 nm, CWDM
	See Ordering Information
Optical Power	-2 dBm @ 1310 nm (typical)

General card specifications

Depth	86 mm ¹
Width	20 mm 4HP
Height	129 mm 3RU
Weight	100 g
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Operating Temp	-30 to +70 °C
Power	2 W
No. of slots	1

¹ (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

BC501T/M	Multimode Composite Video + 2 x Balanced Line Level Analogue Audio Transmitter Card
BC501T/S	Singlemode Composite Video + 2 x Balanced Line Level Analogue Audio Transmitter Card (1310nm)
BC501T/S/15	Singlemode Composite Video + 2 x Balanced Line Level Analogue Audio Transmitter Card (1550nm)
BC501T/S/CWDM	Singlemode Composite Video + 2 x Balanced Line Level Analogue Audio Transmitter Card .
	(Dedicated CWDM Tuned Laser, Wavelength to suit ITU Grid Spacing - see CWDM Ordering Matrix).

Fitted with LC connectors as standard

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