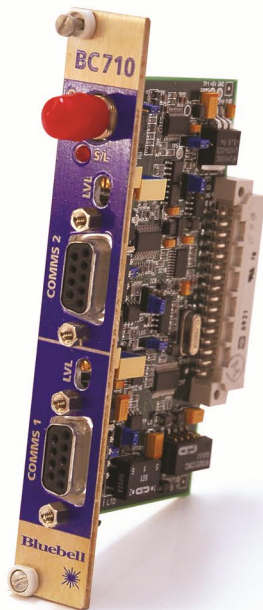


# Bluebell

## BC Series Modular Fibre Optic Interface System



## BC710 Dual Circuit 4-wire Comms Optical Transceiver Analogue Audio

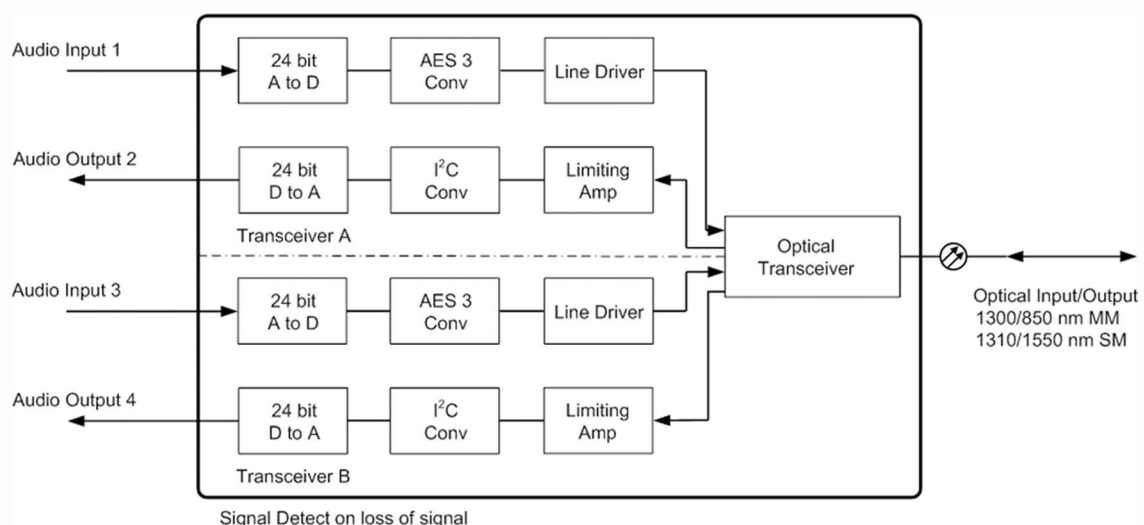
The BC710 is a transceiver card for the transmission of two independent duplex audio signals over a single fibre optical cable. The BC710 provides two independent circuits for use in 4-wire comms systems. Each analogue audio input or output is converted via 24 bit converters to maintain maximum resolution for use in professional broadcast audio applications. All Bluebell cards are designed to retain maximum integrity of the signal path offering excellent jitter free optical transport.

The BC710 is available in multimode and single-mode variants to suit any fibre application. An electrical AES output is available for local monitoring or distribution of the input audio. Alternatively the AES feed can be selected from the receiving remote audio over the fibre.

The BC710 can be used (without an SFP) as an A/D converter or to provide two analogue inputs to an AES BC460T embedder.

The BC710 occupies a single slot in the BC100-3RU 19" rack-mounting frame which can hold up to 15 single slot cards. This dual functionality allows 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 BC710 can be housed in an individual rugged enclosure.



## Specifications

### Electrical Input/Output

Connector 9 way D sub-connector  
Format 20 Hz to 20 kHz +/- 0.25 dB distortion  
0 dB system gain, 18 dBu ref 1 mW into  
600 Ohm  
Number 4 x Balanced Line Level Analogue Audio

### Optical Input/Output

Connector\* 1 x female FC/PC, ST or SC  
See Ordering Information  
Wavelength

	Input (nm)		Output (nm)	
	MM	SM	MM	SM
Input 1,3	1300	1550	850	1310
Output 2,4	850	1310	1300	1550

See Schematic

Optical Power -15 dBm @ 850 nm  
- 15 dBm @ 1310 nm multimode  
- 6 dBm @ 1310 nm singlemode  
- 6 dBm @ 1510 nm

Sensitivity > -3 dB to -30 dBm

Max I/P power > -1 dBm

## General

Depth 60mm  
Width 20mm 4TE  
Height 100 mm (3RU)  
Weight 100 g  
Operating Temp -30 to +70 °C  
Power 2.2 W  
Signal detect LED on for loss of signal  
Conformance Complies with 89/336/EEC  
EMI/RFI Complies with EN 61000-6-1,  
EN61000-6-2  
Electrical Complies with Class 1 laser product  
Laser Safety 24 CFR 1040.10 & 1040.11  
Complies with Directive 2002/95/EC  
RoHS 5 years  
Warranty

\*See ordering information

The connector types specified below are supplied as standard.  
For alternative connectors please replace the last two suffixes  
of the part number with the relevant type.  
Please contact the Sales Office before ordering.

ST	ST connector
FC	FC connector
SC	SC connector

## Ordering Information

BC710M/LC Multimode 4-Wire Comms Talkback to Optical Transceiver Card with LC connector  
(850/1300 nm)  
BC710S/LC Singlemode 4-Wire Comms Talkback to Optical Transceiver Card with LC connector  
(1310/1550 nm)

## 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).  
BC160 19" 1RU Chassis for up to 6 BCxxx Cards fitted with Dual Redundant Power Supplies.  
BM100 Network Monitoring Card with GPI Output on a SCSI Connector for Slot-16  
BM101 Network Monitoring Card with Ethernet connection for Slot-16