

BC Series Modular Fibre Optic Interface System



BC620R 8 Channel Balanced Analogue Audio De-Multiplexer

Audio

The BC620R is a receiver for the reception of multiple channels of analogue line level audio over one optical fibre. All inputs are buffered then converted using full 24 bit A/D conversion then multiplexed onto a single optical data stream.

The BC620R is particularly suited for multichannel audio transport and applications that require the audio to be carried independently to video or embedded audio signals.

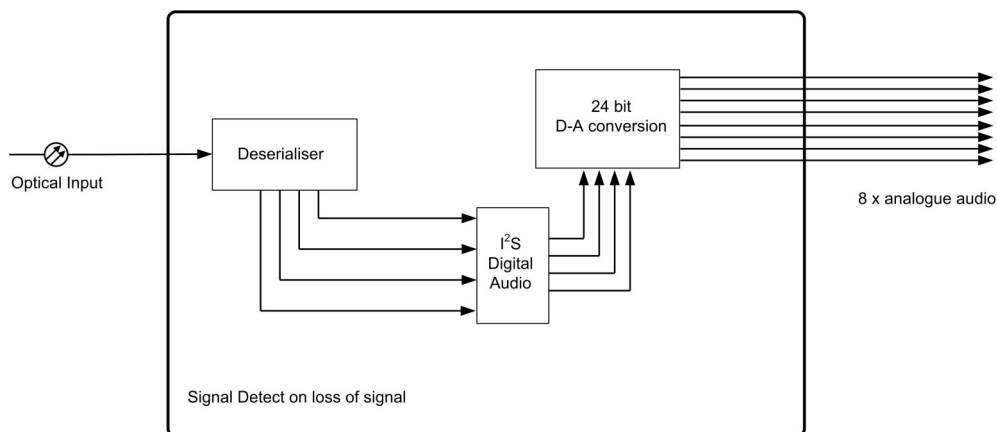
All Bluebell cards are designed to retain maximum integrity of the signal path offering excellent jitter free optical transport. The BC620R is available in multimode, singlemode, WDM and CWDM variants to suit any fibre application.

The BC620R can be used with a BC630T allowing AES inputs to feed analogue outputs.

The BC620R 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 BC620R can be housed in an individual rugged enclosure.

Schematic Diagram BC620R



Rear Panel



Specifications

Optical Input

| | |
|------------------------|--|
| Connector ¹ | 1 x female LC |
| Wavelength | 1200-1610 nm |
| | See Ordering Information for multimode and singlemode variants |
| Sensitivity | > -24 dBm @ 1.25 Gb/s > -28 dBm @ 0.62 Gb/s > -28 dBm @ 155 Mb/s |
| Max I/P power | > -1 dBm |

Electrical Output Audio

| | |
|-------------|---|
| Connector | 26-way D connector, |
| Impedance | 44 Ohm differential output |
| Bandwidth | 20 Hz to 20 kHz +/- 0.25 dB |
| System Gain | 0 dB, nominal +/- 0.5dB |
| Format | Output level +18 dBu Maximum Ref 1 mW into 600 Ohm |
| Number | 8 x Balanced Line Level Analogue Audio |
| Noise ref | < -90 dB p-p weighted full scale |
| Out Imp | < 50 Ohm |

General card specifications

| | |
|----------------|---------------------------|
| Depth | 60 mm |
| Width | 20 mm 4TE |
| Height | 100 mm (3RU) |
| Weight | 100 g |
| Operating Temp | -30 to +70 °C |
| Power | 2.5 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

| | |
|--|--|
| BC620R/M | Multimode Optical Receiver Card for 8 x Analogue Audio Signals. |
| BC620R/S | Singlemode Optical Receiver Card for 8 x Analogue Audio Signals. |
| All versions LC connectors as standard. | |

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. Optional Network Monitoring. |
| BC110 | Single Slot Chassis with Universal Mains Power Supply |
| BC120 | Triple Slot Chassis with Universal Mains Power Supply |