# Bluebell ✷

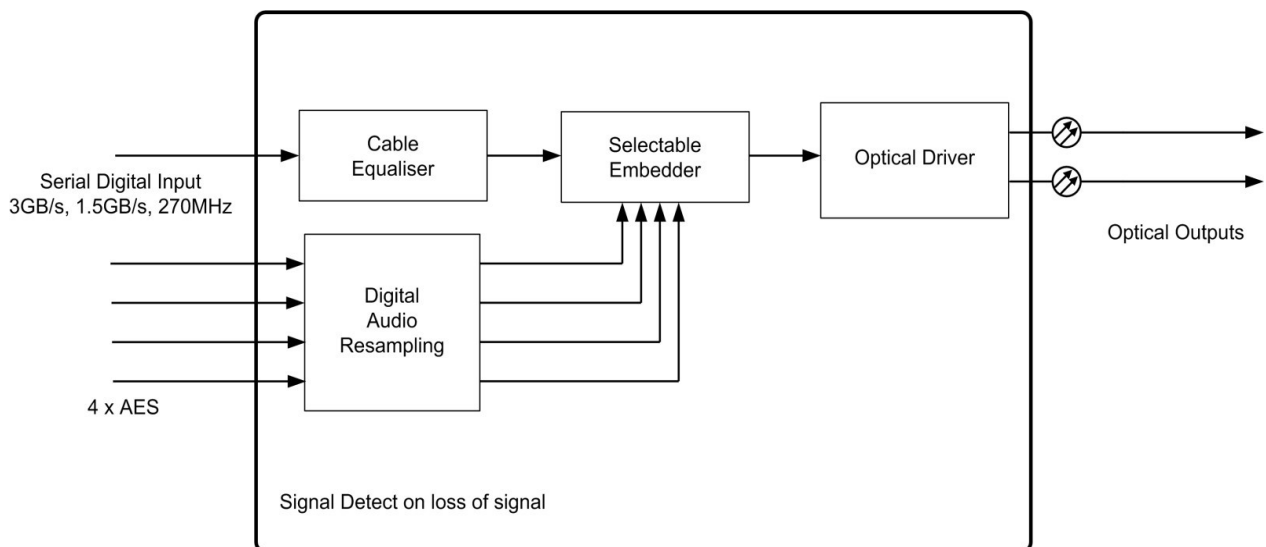## BC Series Modular Fibre Optic Interface System

### Description:

- The BC460T is a transmitter that converts 3G/HD/SD-SDI into an optical signal and embeds 4 channels of AES/EBU audio.
- The input is auto-sensed, equalised, and then converted for transmission over a single optical fibre, ensuring jitter-free performance.
- Can be paired with the BC450R de-embedder to convert AES inputs into analogue outputs.
- Available in multimode, singlemode, WDM, and CWDM variants for flexible fibre deployment.
- Fits a single slot in the BC100-3RU frame, which supports up to 15 single-slot cards.
- Some BC Series cards have dual functionality, allowing up to 30 video channels per frame.
- SNMP monitoring is supported via the BM101 card, with optional GP-output alarms through the BM100 module.
- Also offered in a rugged standalone enclosure for individual use.

## BC460T Single Channel Electrical to Optical Embedder          3G-SDI, HD-SDI, SD-SDI



Serial Digital Input 3GB/s, 1.5GB/s, 270MHz — Cable Equaliser — Selectable Embedder — Optical Driver — Optical Outputs

4 x AES — Digital Audio Resampling

Signal Detect on loss of signal

| Electrical Input Video | |
|---|---|
| Standards | SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M |
| Equalisation | Automatic to 100 m @ 3 Gb/s Automatic to 200 m @ 1.485 Gb/s Automatic to 300 m @ 270 Mb/s |
| Connector | 75 Ohm BNC per IEC 60169-8 Amendment 2 |
| Return Loss | > 15 dB @ 1.485 Gb/s |

| Electrical Input Audio | |
|---|---|
| Connector | 26-way D connector |
| Impedance | 110 Ohm |
| Format | AES 48 kHz AES3-1992 |
| Number | 4 x AES/EBU Digital Audio |

| Optical Output | |
|---|---|
| Connector | 1 x Female LC |
| Wavelength | 850 nm, 1310 nm, 1550 nm, CWDM See Ordering Information |
| Optical Power | -2 dBm @ 1310 nm(typical) -2 dBm @ 1510 nm(typical) 0 dBm @ CWD (typical) |

| General Card Specification | |
|---|---|
| Depth | 60 mm |
| Width | 20 mm 4TE |
| Height | 129 mm (3RU) |
| Weight | 100 g |
| Operating Temp | -30 to +70 $^0$C |
| Power | 2.2 W |
| Signal Detect | LED on for signal loss |
| 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

| | |
|---|---|
| BC460T/M/SFP | Multimode 3G-SDI Optical Transmitter Card with 4 x AES Embedder with LC connector |
| BC460T/S/13/SFP | Singlemode 3G-SDI Optical Transmitter Card with 4 x AES Embedder (1310nm) with LC connector |
| BC460T/S/15/SFP | Singlemode 3G-SDI Optical Transmitter Card with 4 x AES Embedder (1550nm) with LC connector |
| BC460T/S/CWDM/SFP | Singlemode 3G-SDI Optical Transmitter Card with 4 x AES Embedder with LC connector (Dedicated CWDM Tuned Laser,  Wavelength to suit ITU Grid Spacing). See "CWDM Ordering Matrix" for additional information on ordering. |

**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 |

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