



Product Data Sheet

Bluebell BC323 Dual Fibre Optic Transmitter

Description



The BC323 is a transmitter module for the conversion of two independent 3G-SDI, HD-SDI, SD-SDI and ASI signals into fibre optical cable. Each incoming signal is auto-sensed and then equalised and reclocked prior to conversion and transmission down a separate single optical fibre. Each BC323 Transmitter is housed in a compact robust enclosure and is designed for outside broadcast and special events as well as studios. Power is provided via the PS12 unit supplied separately. The PS12 has an IEC mains inlet allowing easy adoption into standard equipment bays. The BC323 Transmitter has a 4 pin XLR allowing power from a variety of external DC sources in the range 4.5 to 17 V. The BC323's are extremely compact dual channel fibre optic converters that are perfectly suited to provide interference free transmission and for extending the range of electrical signals, particularly HD-SDI and 3G-SDI signals. Each channel can operate in non-reclocking mode and handles data rates from 50 Mb/s to 3 Gb/s. The BC323 Transmitter is available in singlemode, WDM and CWDM variants to suit any fibre application. The BC323 Transmitter can also be used to interface to any of the standard Bluebell cards and enclosures.

Product	SKU
BLUEBELL BC323T DUAL FIBRE OPTIC TRANSMITTER	BLU-323T
BLUEBELL BC323T/M DUAL FIBRE OPTIC TRANSMITTER	BLU-323TM
BLUEBELL BC323T/S/13/13 SM DUAL FIBRE OPTIC TRANSMITTER	BLU-323TS1313
BLUEBELL BC323T/S/13/15 SM DUAL FIBRE OPTIC TRANSMITTER	BLU-323TS1315
BLUEBELL BC323TSCWDM SM DUAL FIBRE OPTIC TRANSMITTER	BLU-323TSCWDM

Key Benefits

- Dual electrical input to dual optical output 3G-SDI, HD-SDI, SD-SDI, ASI
- Signal reclockers
- Singlemode, WDM and CWDM variants available
- Handles data rates from 50 Mb/s to 3 Gb/s
- 4 pin XLR power connection
- Compact and robust enclosure



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Technical Specification

Bluebell BC323 Dual Fibre Optic Transmitter Specification

Electrical Input	Width: 64 mm
Standards: SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M, DVB-ASI	Height: 30 mm Excluding connectors
Equalisation: Automatic to 100 m @ 3 Gb/s	Weight: 100g
Automatic to 200 m @ 1.485 Gb/s	Operating Temp: -30 to +70 °C
Automatic to 300 m @ 270 Mb/s	Power: 2 W
Equaliser and reclocking can be bypassed to support data rates down to 50 Mb/s	Voltage: 4.5 to 17 V dc
Connector: 1 x 75 Ohm BNC per IEC 60169-8 Amendment 2 per channel	Signal detect: LED on for loss of signal
Return Loss: > 15 dB @ 1.485 Gb/s	Conformance
Format: Reclocked (with bypass to support data rates down to 50 Mb/s) Please note that the factory default unless specified is for units to be supplied default unless specified is for units to be supplied in reclocking mode. Non-reclocking settings are accessed via module pcb.	EMI/RFI: Complies with 89/336/EEC
Optical Output	Electrical: Complies with EN 61000-6-1, EN61000-6-2
Connector: 1 x female LC as standard per channel	Laser Safety: Complies with Class 1 laser product 24 CFR 1040.10 & 1040.11
Wavelength: 1310-1550 nm	RoHS: Complies with Directive 2002/95/EC
Optical Power: -2 dBm @ 1310 nm (typical) -2 dBm @ 1510 nm (typical) 0 dBm @ CWDM (typical)	Warranty: 5 years
General module specifications	
Length: 92 mm 142mm Extended enclosure	

BC323T Ordering Information

3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. **No Optics Fitted.** Includes PS12 power supply.



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Ordering Information

BC323T: 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. **No Optics Fitted.** Includes PS12 power supply.

BC323T/M: Multimode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (850nm). Fitted with LC connectors. PS12 power supply ordered separately.

BC323T/S/13/13 : Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1310nm). Fitted with LC connectors. Includes PS12 power supply.

BC323T/S/13/15: Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1310nm and 1550nm). Fitted with LC connectors. PS12 power supply ordered separately.

BC323T/S/CWDM: Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. (Dedicated CWDM Tuned Laser, Wavelength to suit. LC connectors as standard. Includes PS12 power supply.