



Product Data Sheet

Bluebell BC313 Transmitters

Description



The BC313 is a Transmitter module for the conversion of 3G-SDI, HD-SDI, SD-SDI and ASI signals into fibre optical cable. The incoming signal is auto-sensed and then equalised and reclocked prior to conversion and transmission down a single optical fibre. Each BC313 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 optional PS10/XLR unit. The PS10/XLR has an IEC mains inlet allowing easy adoption into standard equipment bays. The BC313 Transmitter has a 4 pin XLR allowing power from a variety of external DC sources in the range 4.5 to 17 V. The BC313's are extremely compact single 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 BC313 Transmitter is available in singlemode, WDM and CWDM variants to suit any fibre application. The BC313 Transmitter can also be used to interface to any of the standard Bluebell cards and enclosures. The single channel BC313 Transmitter is also available with a loop input.

| Product | SKU |
|--|-------------|
| BLUEBELL BC313T SM SINGLE CHANNEL OPTICAL TRANSMITTER | BLU-313T |
| BLUEBELL BC313T/M MM SINGLE CHANNEL OPTICAL TRANSMITTER | BLU-313TM |
| BLUEBELL BC313T/S/13 SM SINGLE CHANNEL OPTICAL TRANSMITTER | BLU-313TS13 |
| BLUEBELL BC313T/S/15 SM SINGLE CHANNEL OPTICAL TRANSMITTER | BLU-313TS15 |

Key Benefits

- Compact single channel fibre optic converter
- Electrical to Optical Transmitter 3G-SDI, HD-SDI, SD-SDI, ASI
- 1 x video input
- 1 x SFP output
- Signal reclockers
- 4 pin XLR power connection
- Singlemode, WDM and CWDM variants available
- Available with looped input option



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Technical Specification

| Bluebell BC313 Transmitters 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 |
| Equaliser and reclocking can be bypassed to support data rates down to 50 Mb/s | Power: 2.5 W |
| Connector: 1 x 75 Ohm BNC per IEC 60169-8 Amendment 2 | Voltage: 4.5 to 17 V dc |
| Return Loss: > 15 dB @ 1.485 Gb/s Reclocked (with bypass to support data rates down to 50 Mb/s) | Signal detect: LED on for loss of signal |
| Format: Please note that the factory default unless specified is for units to be supplied in reclocking mode. Non-reclocking settings are accessed via module pcb. | Conformance |
| Optical Output | EMI/RFI: Complies with 89/336/EEC |
| Connector: 1 x female LC | Electrical: Complies with EN 61000-6-1, EN61000-6-2 |
| Wavelength: 1310-1550 nm | Laser Safety: Complies with Class 1 laser product 24 CFR 1040.10 & 1040.11 |
| Optical Power: -2 dBm @ 1310 nm (typical) -2 dBm @ 1510 nm (typical) 0 dBm @ CWDM (typical) | RoHS: Complies with Directive 2002/95/EC |
| General module specifications | Warranty: 5 years |
| Length: 92 mm 142mm Extended enclosure | |

Ordering Information

BC313T: Singlemode Single Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1310nm).
No Optics fitted. Includes PS12 power supply.

BC313T/M: Multimode Single Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors. Includes PS12 power supply.

BC313T/S/13: Singlemode Single Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1310nm). Fitted with LC connectors. PS12 power supply ordered separately.

BC313T/S/15: Singlemode Single Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI (1550nm). Fitted with LC connectors. PS12 power supply ordered separately.