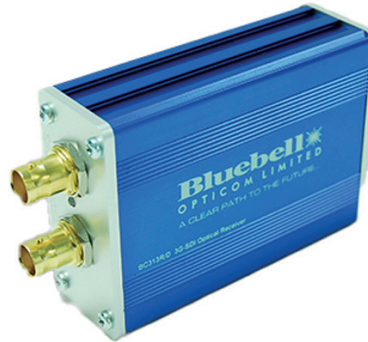




Product Data Sheet

Bluebell BC313 Fibre Optic Receivers

Description



The BC313 is a Receiver for the conversion of an optical signal into electrical 3G-SDI, HD-SDI, SD-SDI and ASI. The incoming optical signal is fed to a trans-impedance and limiting amplifier before being electrically reclocked on the output. Each BC313 Receiver 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 Receiver 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 Receiver is available in singlemode, WDM and CWDM variants to suit any fibre application. The BC313 Receiver can also be used to interface to any of the standard Bluebell cards and enclosures. The single channel BC313 Receiver is also available with dual outputs.

Product	SKU
BLUEBELL BC313R SM SINGLE CHANNEL FIBRE OPTIC RECEIVER	BLU-313R
BLUEBELL BC313R/M MM SINGLE CHANNEL FIBRE OPTIC RECEIVER	BLU-313RM
BLUEBELL BC313R/S SM SINGLE CHANNEL FIBRE OPTIC RECEIVER	BLU-313RS

Key Benefits

- Optical input to electrical output 3G-SDI, HD-SDI, SD-SDI, ASI
- Handles data rates from 50 Mb/s to 3 Gb/s
- 1 x SFP input
- 1 x video output
- Signal reclockers
- 4 pin XLR power connection
- Singlemode, WDM and CWDM variants available
- Available with dual outputs
- Compact, robust enclosure



Product Data Sheet

Bluebell BC313 Fibre Optic Receivers

Technical Specification

Bluebell BC313 Receivers Specification	
Optical Input	General module specification
Connector: 1 x female LC as standard	Length: 92 mm 142mm Extended enclosure
Wavelength: 1270-1610 nm	Width: 64mm
Sensitivity: > -25.0 dBm @ 3 Gb/s > -25.5 dBm @ 1.485 Mb/s > -26.0 dBm @ 270 Mb/s	Height: 30 mm Excluding connector
Max I/P power: >-1dBm	Weight: 100g
Data rate: 50 Mb/s to 3 Gb/s	Operating Temp: -30 to +70°
Electrical Output	Power: 2 W
Standards: SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M, DVB-ASI Automatic rate selection for 3G-SDI, HD-SDI and SD-SDI data rates.	Voltage: 4.5 to 17 V dc
Connector: 1 x 75 Ohm BNC per IEC 60169-8 Amendment	Signal detect: LED on for loss of signal
Return Loss: > 15 dB @ 1.485 Gb/s	Conformance
Polarity: 1 x Non inverting, 1 x inverting output	EMI/RF: Complies with 89/336/EEC
Signal Level: 800 mV +/- 10%	Electrical: Complies with EN 61000-6-1, EN61000-6-
DC Offset: 0 +/- 0.5 V	Laser Safety: Complies with Class 1 laser product 24 CFR 1040.10 & 1040.11
Jitter: <0.15 UI line equalise	RoHS: Complies with Directive 2002/95/EC
Format: Reclocked (with bypass to support data rates down to 10 Mb/s) 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.	Warranty: 5 years

Ordering Information

BC313R: Singlemode Single Channel 3G/SDI, HD/SDI Fibre Optic Receiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. **No Optics Fitted.** Includes PS12 power supply.

BC313R/M: Multimode Single Channel 3G/SDI, HD/SDI Fibre Optic Receiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors. Includes PS12 power supply.

BC313R/S: Singlemode Single Channel 3G/SDI, HD/SDI Fibre Optic Receiver Module, Auto-Sensing for SDI, ASI, HD/SDI and 3G/SDI. Fitted with LC connectors. Includes PS12 power supply.