

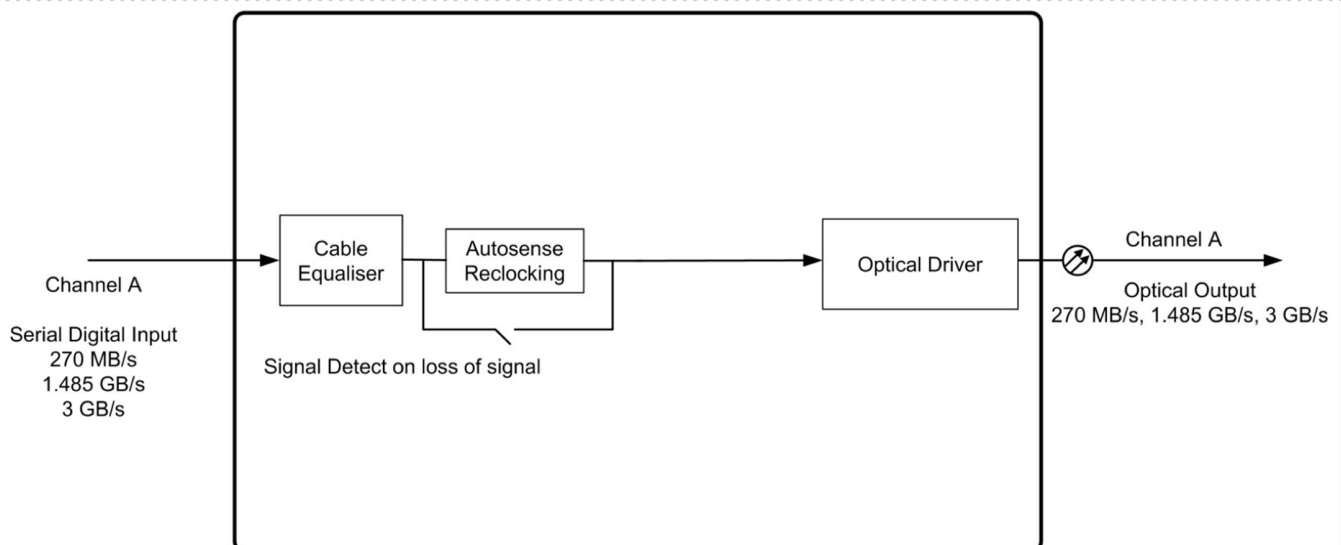
Bluebell

BC Series Modular Fibre Optic Interface System



BC313T Electrical to Optical Transmitter 3G-SDI, HD-SDI, SD-SDI, ASI

The BC313T 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 BC313T 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 BC313T has a 4 pin XLR allowing power from a variety of external DC sources in the range 4.5 to 17 V. The BC313s 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 BC313T is available in singlemode, WDM and CWDM variants to suit any fibre application. The BC313T 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 - see separate datasheet for full technical information.



Electrical Input

Standards	SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M, DVB-ASI
Equalisation	Automatic to 100 m @ 3 Gb/s Automatic to 200 m @ 1.485 Gb/s Automatic to 300 m @ 270 Mb/s Equaliser and reclocking can be bypassed to support data rates down to 50 Mb/s
Connector	1 x 75 Ohm BNC per IEC 60169-8 Amendment 2
Return Loss	> 15 dB @ 1.485 Gb/s
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 in reclocking mode. Non-reclocking settings are accessed via module pcb.

Optical Output

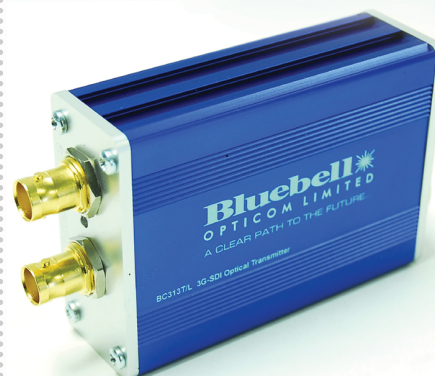
Connector	1 x female LC
Wavelength	1310-1550 nm See Ordering Information
Optical Power	-2 dBm @ 1310 nm (typical) -2 dBm @ 1510 nm (typical) 0 dBm @ CWDM (typical)

General module specifications

Length	92 mm 142mm Extended enclosure
Width	64 mm
Height	30 mm Excluding connectors
Weight	100 g
Operating Temp	-30 to +70 °C
Power	2.5 W
Voltage	4.5 to 17 V dc
Signal detect	LED on for loss of signal

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

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. PS12 power supply ordered separately.
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.
BC313T/S/CWDM	Singlemode Single 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 ITU Grid Spacing - see CWDM Ordering Matrix). LC connectors as standard. PS12 power supply ordered separately.
PS12	10 watt Plugtop PSU for the BC313/323/550 Product Range. Fitted with 4 pin XLR.

The BC313 can also be supplied in an “extended” enclosure with ST connectors — add /ST to the end of the part numbers above.