

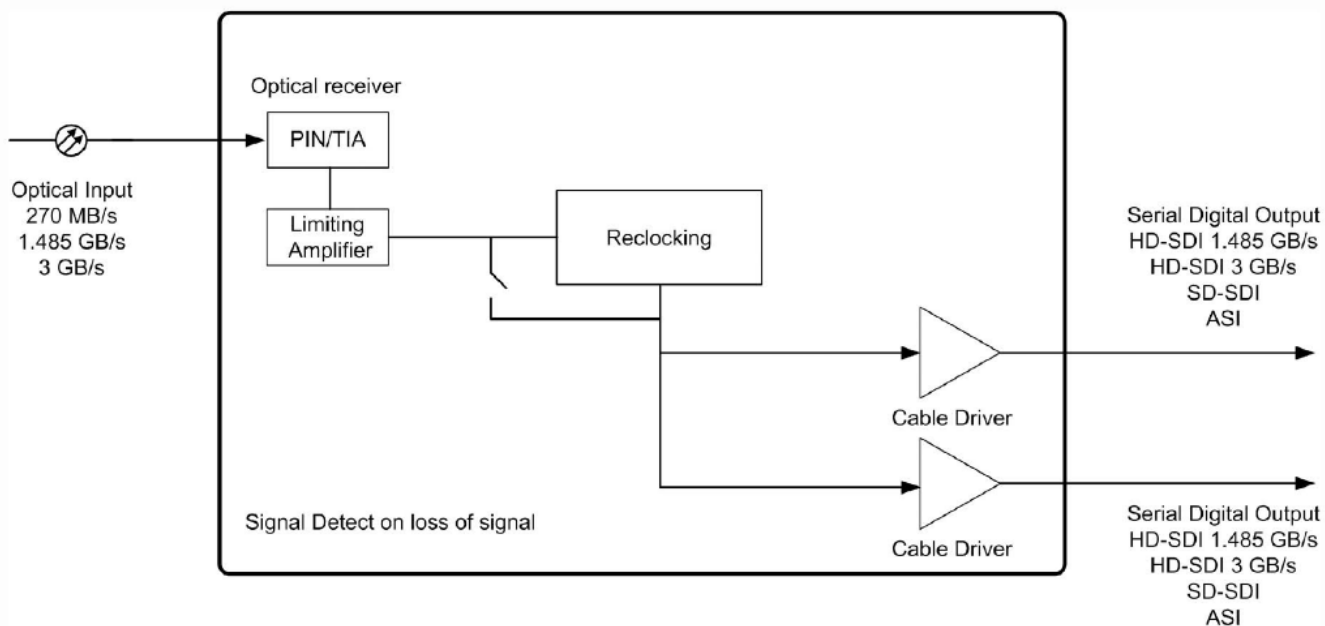
BC Series Modular Fibre Optic Interface System



Description:

- BC313R Function: Converts optical signals to electrical 3G-SDI, HD-SDI, SD-SDI, or ASI
- Optical signal processed through trans-impedance and limiting amplifier, then reclocked on output
- Designed for Outside Broadcast, special events, and studio use
- Compact, robust, single-channel fibre optic converter for interference-free transmission
- Extends range of electrical signals, especially HD-SDI and 3G-SDI
- Can operate in non-reclocking mode, supporting 50 Mb/s to 3 Gb/s data rates
- Available in singlemode, WDM, and CWDM versions for different fibre applications
- Compatible with all standard Bluebell cards and enclosures
- Optional PS10/XLR power supply with IEC mains inlet for easy rack integration
- 4-pin XLR input allows DC power from 4.5 V to 17 V sources
- Also available in a dual-output version (see separate datasheet)

Schematic diagram:



Specifications

Optical Input	
Connector	1 x female LC as standard See Ordering Information
Wavelength	1270-1610 nm See Ordering Information for multimode and singlemode variant
Sensitivity	> -25.0 dBm @ 3 Gb/s > -25.5 dBm @ 1.485 Mb/s > -26.0 dBm @ 270 Mb/s
Max I/P power	>-1dBm
Data rate	50 Mb/s to 3 Gb/s
Electrical Output	
Standards	SMPTE 424M, SMPTE 292M, SMPTE 259M, SMPTE 297M, DVB-ASI Automatic rate selection for 3G-SDI, HD-SDI and SD-SDI data rates.
Connector	1 x 75 Ohm BNC per IEC 60169-8 Amendment
Return Loss	> 15 dB @ 1.485 Gb/s
Polarity	1 x Non inverting, 1 x inverting output
Signal level	800 mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.15 UI line equalised
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.

General Module Specifications	
Length	92mm 142mm Extended enclosure
Width	64mm
Height	30mm Excluding connectors
Weight	100g
Operating Temp	-30 to +70 °C
Power	2 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

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



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