

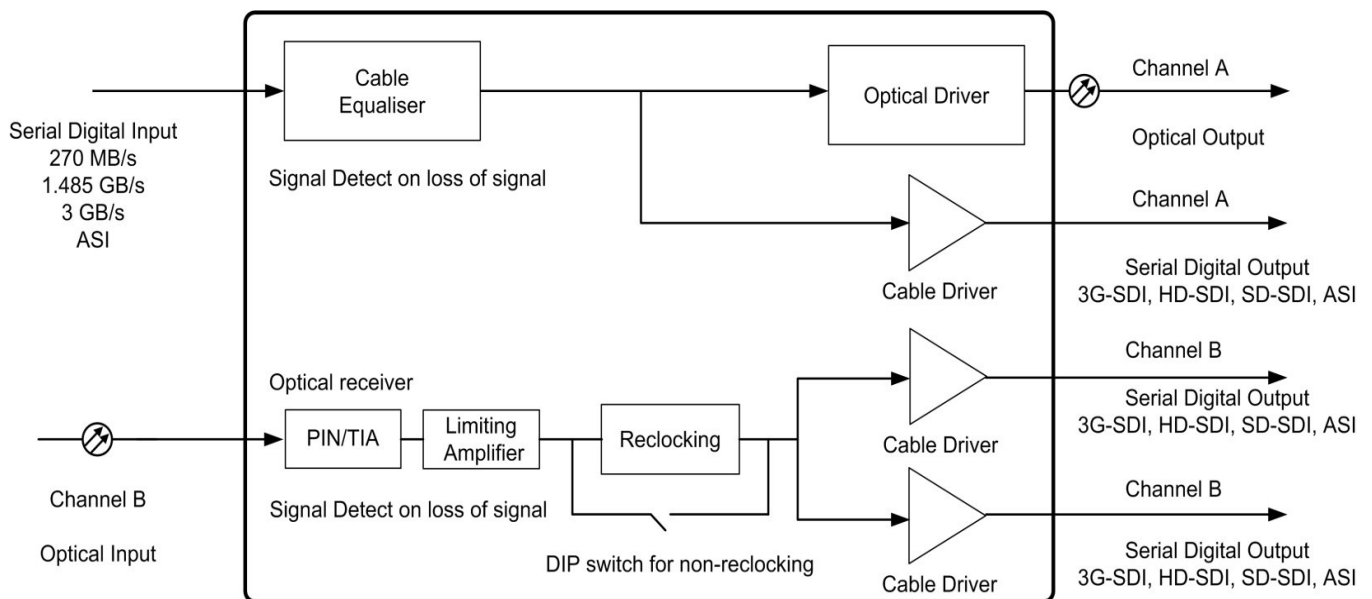
BC Series Modular Fibre Optic Interface System



Description:

- 3G-SDI, HD-SDI, SD-SDI, and ASI transceiver.
- Supports two independent transport streams in opposite directions on two fibres.
- Channel A: Auto-sensing 3G-SDI optical transmitter; handles all Serial Digital Video formats from 50 Mb/s to 3.0 Gb/s.
- Cable equalised, reclocked, and sent to an optical driver (singlemode, multimode, or CWDM).
- Includes an active loop-through output.
- Channel B: 3G-SDI optical receiver; optical signal is amplified, auto-sensed, reclocked, and output via two BNC connectors.
- Provides jitter-free optical transport with maximum signal integrity.
- Available in singlemode, WDM, and CWDM variants.
- Fits a single slot in the BC100-3RU rack (up to 15 channels per frame).
- Monitoring via SNMP (BM101 card) or GP-output alarms (BM100 module).
- Can be supplied in a rugged standalone enclosure for portable use.

BC360R Schematic diagram:



Specifications

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	75 Ohm BNC per IEC 60169-8 Amendment 2
Return loss	> 15 dB@ 1.485 Gb/s
Optical Output	
Connector	1 x female LC as standard per channel
Wavelength	1310-1550 nm (See Ordering Info)
Optical power	-2 dBm@ 1310 nm (typical) -2 dBm @ 1510 nm (typical) 0 dBm @ CWDM (typical)
Optical Input	
Connector	1 x female LC as standard per channel
Wavelength	1260 – 1620nm See Ordering Info for multimode and singlemode variants
Sensitivity	> -25.0 dBm @ 3 Gb/s > -25.5 dBm @ 1.485 Mb/s > -26.0 dBm @ 270 Mb/s
Max I/P power	> -1 dBm
Data rate	50 Mb/s to 3 Gb/s

General module specifications	
Depth	60 mm
Width	20 mm 4TE
Height	129 mm (3RU)
Weight	100 g
Operating Temp	-30 to +70 °C
Power	3W
Signal Detect	LED on for signal loss
No. of slots	1
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
Electrical Output	
Connector	75 Ohm BNC per IEC 60169-8 Amendment 2 per channel
Return loss	> 15 dB@ 1.485 Gb/s
Format	Driven active loop out
Polarity	Non inverting.
Signal Level	800 mV +/- 10%
DC Offset	0 +/- 0.5 V
Jitter	<0.15 UI line equalized

Ordering Information

BC360/M	Multimode 3G/SDI Fibre Optic Transceiver Card, Auto-Sensing for 3G-SDI, HD/SDI, SD/SDI, ASI. BC360/S/13/WB
BC360/S/15/WB	Singlemode 3G/SDI Fibre Optic Transceiver Card, Auto-Sensing for 3G-SDI, HD/SDI, SD/SDI, ASI (1310nm).
BC360/S/CWDM/WB	Singlemode 3G/SDI Fibre Optic Transceiver Card, Auto-Sensing for 3G-SDI, HD/SDI, SD/SDI, ASI (1550nm).
	Singlemode 3G/SDI Fibre Optic Transceiver Card, Auto-Sensing for HD/SDI, SD/SDI, ASI (CWDM Tuned Lasers)
	Each card has a transmitter at the specified wavelength and a separate wideband receiver. See "CWDM Ordering Matrix" for additional information on ordering.

Universal Chassis and Power Supplies

BC100-3RU	19" 3RU Chassis for up to 15 BCxxx Cards with optional Network Monitoring and facility for Dual Redundant Power Supplies (not supplied).
BC100-3RU/48V	19" 3RU Chassis for up to 15 BCxxx Cards with optional Network Monitoring and facility for Dual Redundant Power Supplies (not supplied). Fitted with 48V dc input.
BM100	Network Monitoring Card with GPI Output on a SCSI Connector for Slot-16
BM101	Network Monitoring Card with Ethernet connection for Slot-16
PS65	90-250VAC Power Supply for BC100-3RU or BB100-3RU Chassis
BC160	19" 1RU Chassis for up to 6 BCxxx Cards. Includes Dual Redundant Power Supplies. Optional Network Monitoring.
BC110	Single Slot Chassis with Universal Mains Power Supply
BC120	Triple Slot Chassis with Universal Mains Power Supply



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