

Bluebell

BN324 Series 12G Optical Interfaces

12G



Four versions:

BN324T Dual SDI inputs to dual fibre outputs

BN324R Dual fibre inputs to dual SDI outputs

BN324TR channel A is configured as a transmitter, and channel B as a receiver

BN324A “adaptive” variant automatically configures itself dependent on the SFP

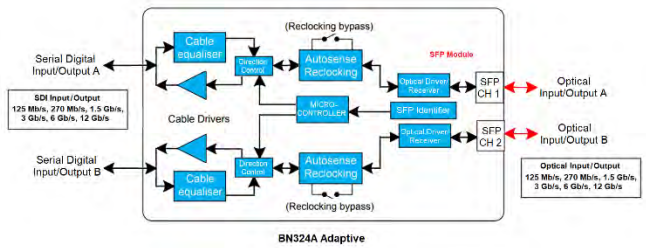
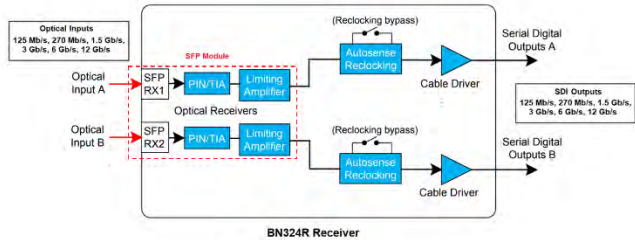
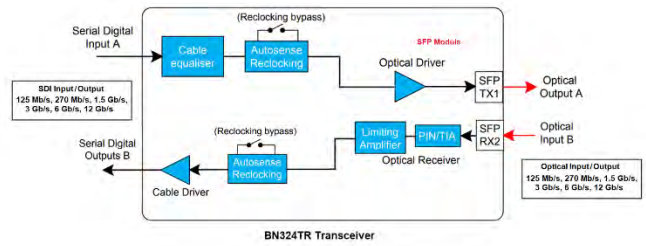
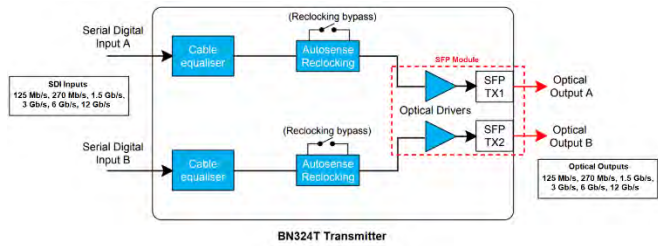
The BN324 Series is a range of compact, stand-alone fibre interfaces, which are primarily intended for video OB applications of up to 4K format. They allow SDI video signals meeting SD, HD, 3G, 6G or 12G standards to be transmitted over fibre-optic cable. Two BNC connectors provide the “copper” connections; the optical port is a dual SFP cage fitted with an appropriate module. The interfaces can alternatively be used for the transmission of MADI data.

This Quick Start Guide covers four variants comprising the range:

- BN324T transmitter – two independent channels, dual SDI inputs to dual fibre outputs
- BN324R receiver – two independent channels, dual fibre inputs to dual SDI outputs
- BN324TR transceiver – two independent channels: channel A is configured as a transmitter, and channel B as a receiver
- BN324A “adaptive” variant – may be supplied with an SFP module of the customer’s choice, or with an empty SFP cage. It allows users to fit SFP modules of their own choice to suit different applications.

Depending on the type of SFP module, the BN324A will automatically configure itself as a dual transmitter, a dual receiver, or a transceiver.

Diagrams



Specifications

Electrical Input	Connector	75 Ohm BNC per IEC 60169-8 Amendment 2
	Return Loss	<-15dB to 1.485GHz <-10dB to 3GHz <-7dB to 6GHz <-4dB to 12GHz
	Standards	SMPTTE ST 2082, SMPTTE ST 2081, SMPTTE ST 424, SMPTTE ST 292, SMPTTE ST 259, DVB-ASI
	Polarity	Non-inverting
	Equalisation	Automatic rate detection and cable equalisation 70m @ 11.88Gbps 90m @ 5.94Gbps 170m @ 2.97Gbps 240m @ 1.485Gbps 400m @ 270Mbps
Electrical Output	Connector	75 Ohm BNC per IEC 60169-8 Amendment 2
	Return Loss	<-15dB to 1.485GHz <-10dB to 3GHz <-7dB to 6GHz <-4dB to 12GHz
	Standards	SMPTTE ST 2082, SMPTTE ST 2081, SMPTTE ST 424, SMPTTE ST 292, SMPTTE ST 259, DVB-ASI
	Polarity	Non-inverting
	Signal Level	800 mV +/- 10%
Optical Input*	DC Offset	0 +/- 0.5 V
	Connector	LC/PC
	Wavelength	1260-1620 nm
	Standards	SMPTTE ST 297
	Sensitivity @ 12G	-13dBm (max)
Sensitivity @ <=6G	-14dBm (max)	
Receiver Overload	-2dBm (min)	
	Connector	LC/PC

Optical Output*

	Standards	SMPTE ST 297
	Power	1 to -5 dBm
Conformities	Laser Safety	Class 1 Laser compliant according to IEC-60825
	RoHS & WEEE	Complies with RoHS Directive 2011/65/EU, WEEE Directive 2012/19/EU
Power	Connector	XLR4
	Voltage	5-17VDC
	Power *	3W typ
General	Dimensions (HxWxD)	30 x 64 x 92mm (Excluding connectors)
	Weight	100g
	Operating Temperature*	0 to +70°C

* Specifications determined by SFP fitted. Typical values shown

Ordering Information

BN324T/S/12G/13/13	Singlemode Dual Channel 12G/SDI, 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI, 3G/SDI and 12G/SDI (2 x 1310nm). Fitted with LC connectors. Includes PS12 power supply.
BN324T/12G/S/CWDM	Singlemode Dual Channel 12G/SDI, 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI, 3G/SDI and 12G/SDI (CWDM). Fitted with LC connectors. Includes PS12 power supply.
BN324R/S/12G	Singlemode Dual Channel 12G/SDI, 3G/SDI, HD/SDI Fibre Optic Receiver Module with Dual Outputs, Auto-Sensing for SDI, ASI, HD/SDI, 3G/SDI and 12G/SDI. Fitted with LC connectors. Includes PS12 power supply.
BN324TR/S/12G	Singlemode 12G/SDI, 3G/SDI, HD/SDI Fibre Optic Transeiver Module 12G/SDI/3G/SDI. Fitted with LC connectors. Includes PS12 power supply
BN324T	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Transmitter Module, Auto-Sensing for SDI, ASI, HD/SDI, 3G/SDI and 12G/SDI (1310nm). No Optics Fitted. Includes PS12 power supply
BN324R	Singlemode Dual Channel 3G/SDI, HD/SDI Fibre Optic Receiver Module, Auto-Sensing for SDI, ASI, HD/SDI, 3G/SDI and 12G/SDI. No Optics Fitted. Includes PS12 power supply.
BN324TR	Singlemode 12G/SDI, 3G/SDI, HD/SDI Fibre Optic Transeiver Module 12G/SDI/3G/SDI. No Optics Fitted. Includes PS12 power supply.
BN324A	Singlemode Adaptive 12G/SDI, 3G/SDI, HD/SDI Fibre Optic Transeiver Module 12G/SDI/3G/SDI. Includes PS12 power supply. No Optics Fitted

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