Product Data Sheet

Bluebell BN623 Audio and Data Fibre Optic Transceiver

Description

The BN623 is a compact stand-alone multi-format converter for use with broadcast analogue audio and control signals. Two bi-directional analogue audio signals are provided over 2 fibres. Additional control data and GPI signals are also transmitted over the same pair of fibres. The BN623 is ideally suited to linking audio intercom panels remotely over fibre. The BN623 can be supplied in multimode, singlemode and CWDM variations to suit all applications and is a perfect complement to the BC323, BC550 and BC323-63 modules. Power is provided by a DC source of 4.5 to 17V via a 4 pin XLR or the Bluebell PS12 in-line power adapter.

For applications requiring serial control data only the BN723 is available.

Product	SKU
BLUEBELL BN623 AUDIO AND DATA FIBRE OPTIC TRANSCEIVER	BLU-623
BLUEBELL BN623/S/13/15 AUDIO AND DATA FIBRE OPTIC TRANSCEIVER	BLU-623S1315
BLUEBELL BN623/S/15/13 AUDIO AND DATA FIBRE OPTIC TRANSCEIVER	BLU-623S1513
BLUEBELL BN623/S/CWDM/XX/WB AUDIO AND DATA FIBRE OPTIC TRANSCEIVER	BLU-623SCWDMXXWB

Key Benefits

- The BN623 is specifically designed to link remote panels in an intercom system back to the main central routing position.
- The robust design allows the unit to be deployed in OB or flypack applications.
- Can be supplied in multimode, singlemode, and CWDM variations to suit all applications, offering a perfect complement to the BC323, BC550, and C323-63 modules.
- Power can be supplied direct to the unit from the standard Bluebell PS12 or any readily available DC supply found on-site.
- A complimentary modular BC Series card is also available when a 19" rack-based solution is required.

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Technical Specification

Bluebell BN623 Transceiver Specification	
Electrical Input/Audio	**Max I/P power:** >-1dBm
Connector: 44 pin D connector 2 x analogue audio1, 20 Hz– 20 kHz ± 0.3 dB	**General card specification**
Format: 2 x RS232 Bi-directional	**Dimensions (HxWxD):** 30 x 64 x 92mm (Excluding connectors)
2 x RS422/485 Bi-directional	**Weight:** 100g
2 x GPI Bi-directional	**Power:** 2.5W
Optical Output	**Conformance**
Connector: 1 x female LC as standard per channel TX wavelength and power plus receive sensitivity are defined by the SFP fitted	**EMI/RF:** Complies with 89/336/EEC, EN55022B, EN61000-4-2, EN61000-4-4-(Level 2), EN61000-4-4FTB, EN61000-4-5, EN61000-4-11
Typical values are outlined below:	**Electrical:** Complies with EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
TX Power: -2 dBm @ 1310 nm (typical)	**Laser safety:** Dependent on SFP fitted. Complies with Class 1 laser product
0 dBm @ CWDM (typical)	**RoHS:** Complies with Directive 2002/95/EC
RX Wavelength: 1200-1610 nm	**Warranty:** 5 years
RX Sensitivity: > -24 dBm @ 1.25 Gb/s	

Note: audio is designed for talkback system – bandwidth 20Hz -20kHz with amplitude restricted to +6dBu. Supplied with mating D-Type connector parts.

For BN723 data only versions, replace BN623 with BN723

Ordering Information

BN623: Audio and Data Fibre Optic Transceiver Base Module. Provides 2 x analogue audio, 2 x RS232, 2 x RS422/485 and 2 x GPI over fibre. No Optics Fitted. Includes PS12 power supply. Fitted with LC connectors.

BN623/S/13/15: Singlemode Single Fibre Audio and Data Fibre Optic Transceiver Module. Provides 2 x analogue audio, 2 x RS232, 2 x RS422/485 and 2 x GPI over 1 fibre. (1310 nm TX). Used in conjunction with BN623/S/15/13 as a matched pair. Fitted with LC connectors.Includes PS12 power supply.

BN623/S/15/13: Singlemode Single Fibre Audio and Data Fibre Optic Transceiver Module. Provides 2 x analogue audio, 2 x RS232, 2 x RS422/485 and 2 x GPI over 1 fibres. (1550 nm TX). Used in conjunction with BN623/S/13/15 as a matched pair. Fitted with LC connectors. Includes PS12 power supply.

BN623/S/CWDM/xx/WB: Singlemode Dual Fibre Audio and Data Fibre Optic Transceiver Module. Provides 2 x analogue audio, 2 x RS232, 2 x RS422/485 and 2 x GPI over 2 fibres. (CWDM TX and Wideband receiver). Fitted with LC connectors. Includes PS12 power supply.