# Bluebell

**BN810 Ethernet to optical converter** 

48G



- Copper twisted pair to fibre media converter
- Support for 10Base-T, 100Base-T or 1000Base-T data
- Conversion to 100Base-FX or 1000Base-X format
- Choice of SFPs
- Distances of up to 120km achievable
- Rugged enclosure suitable for OB applications

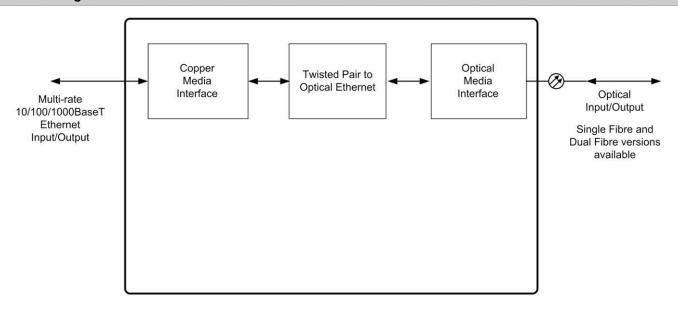
# Multi-rate Ethernet to Fibre Converter Card 10/100/1000BaseT

The BN810 is a copper twisted pair to fibre optic media converter for conversion between copper twisted pair 10Base-T, 100Base-T or 1000Base-T data to fibre optic 100Base-FX or 1000Base-X format. Data isolation transformers are provided for the twisted pair input and output. LEDs provide power, network and fibre activity indication. All Bluebell products are designed to retain maximum integrity of the signal path offering excellent jitter free optical transport.

The BN810 is available in multimode and singlemode variants to suit any fibre application. Versions can be selected which provide full duplex operation over two fibres or a single fibre with distances of 120km achievable with the right SFP. CWDM versions are available to support the ITU G.694.2 grid specifications.

The BN810 can be used as a remote Ethernet conversion devoie which can be paired with another BN810 or the rack-based BC860 or BC862 Ethernet conversion cards.

### **Schematic Diagram**



### **Specification**

Standard

**Electrical Input/Output** 

RJ45 Connector Number

Format Full duplex 100/1000Base-FX Data

Transmission

10/100/1000BaseT half/full duplex autonegotiation

**IEEE 802.3** 802.3 10 BaseT 802.3u 100 BaseT

802.3ab 1000 BaseT

**Optical Input/Output** 

Connector 1 x female LC/PC Single Fibre Version

2 x female LC/PC Dual Fibre Version

Wavelength See below; dependent upon model type

Standard 100base-FX and 1000base-X

**Optical Power** - 9 dBm @ 850 nm

-15 dBm @ 1310 nm multimode -6 dBm @ 1310 nm and 1550 nm

singlemode

-6 dBm @ CWDM wavelengths

Sensitivity - 3 dBm to - 28 dBm

Max I/P power -1 dBm Conformance

EMI/RFI Complies with 89/336/EEC

Complies with EN 61000-6-1, EN61000-6-2 Electrical Laser safety

Complies with Class 1 laser product

24 CFR 1040.10 & 1040.11

RoHS Complies with Directive 2002/95/EC Warranty

5 years (1 year on SFPs

## **Ordering Information**

Singlemode Dual Fibre 10/100/1000BaseT Ethernet to 1000Base-EX Fibre Converter Card (1310nm). BN810S/2/13/LH

40km Long Haul Transceiver

BN810S/2/CWDM/xx/WB Singlemode Dual Fibre 10/100/1000BaseT Ethernet to 1000Base-EX Fibre Converter Card

(CWDM). CWDM 40km Long Haul Transceiver

BN810S/13/15 Singlemode Single Fibre 10/100/1000BaseT Ethernet to 1000Base-LX10 Fibre Converter Cards (1310nm).

Used in conjunction with BC860/S/15/13 as a matched pair.

BN810S/15/13 Singlemode Single Fibre 10/100/1000BaseT Ethernet to 1000Base-LX10 Fibre Converter Cards (1550nm).

Used in conjunction with BC860/S/13/15 as a matched pair. Fitted with LC connectors as standard

BN810 10/100/1000BaseT Ethernet to 1000BaseT Fibre Converter Module - No Optics Fitted.



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