



Bluebell

# **Schematic Diagram BC2**

## **Specifications**

The BC-2 is a passive device for the multiplexing or demultiplexing of two optical wavelengths onto or from a single fibre optic cable.

The BC-2 operates with 1310 and 1550 nm wavelengths on singlemode fibres. The BC-2/M works with 850 and 1310 nm wavelengths on multimode networks.

As standard transmitters and receivers are used, overlaying an extra wavelength via WDM, proves to be a very cost effective solution for system designers looking to increase capacity on existing networks. This can be particularly true in legacy multimode networks.

One WDM module is used to combine the two separate wavelengths while a second at the receive end separates the two signals again.

Bidirectional links also prove very cost effective using this method.

The BC-2 occupies a single slot in the BC100-3RU 19" rack-mounting frame which can hold up to 15 single slot cards. Some BC Series processing cards have dual functionality allowing up to 30 channels of video to be transmitted or received from a single 3RU frame.

For stand alone applications the BC-2 can be housed in an individual rugged enclosure.

The BC2 can be used to combine the CWDM wavelengths passing to/ from a CWDM mux onto a single fibre.

i.e. the 1310nm leg of the BC2 will transport CWDM wavelengths from  $\,$ 1270-1410nm while the 1550nm leg will transport wavelengths in the range 1470-1610nm.

#### **Optical Specifications**

BC-2 Connector: LC

BC-2/M

Wavelength: BC-2 1310nm and 1550nm BC-2/M 850nm and 1310nm

Insertion Loss:

WDM 850/1310: 1310nm port, 2dB Maximum Loss

850nm port, 3dB Maximum Loss WDM1310/1550: 1310nm port, 2dB Maximum Loss 1550nm port, 2dB Maximum Loss

Isolation:

WDM 850/1310: > 30dB between 1310nm/850nm ports WDM 1310/1550: > 30dB between 1310nm/1550nm

Passes CWDM wavelengths in the ranges

1270-1410nm and 1470-1610nm

### General card specifications

No. of slots Depth 60 mm Width 20 mm Height 100 mm 3RU 100 g Weight 0 to +70 °C Operating Temp Max Optical Power 250 mW

## Ordering Information

BC2/LC Wave Division Multiplexer for combining/separating singlemode 1310nm and 1550nm wavelengths.

Fitted with LC connectors.

BC2/2/LC Wave Division Multiplexer for combining/separating singlemode 1310nm and 1550nm wavelengths.

Two independent WDM units on a single BC Series card. Fitted with LC connectors.

BC2/M Wave Division Multiplexer for combining/separating multimode 850nm and 1310nm wavelengths.

Fitted with ST connectors.

Please contact the Sales Office if other connector formats are required.

Fitted with LC connectors as standard

For all available enclosures and frames see section "Universal Chassis and Power Supplies".