Bluebell ✳

BC SERIES MODULAR
FIBRE OPTIC
INTERFACE SYSTEM

BC160i Modular
Rack Frame System

The BC160i is a major evolution of Bluebell's BC160 rack frame for the BC Series of fibre optic interface cards. Like the BC160, it features dual redundant power supplies and can hold up to six single-slot BC cards of any type, but now provides significantly enhanced card monitoring.

The BC160i is ideal for use in OB and live production trucks, fixed installations and fly-away systems. BC Series cards plug into the rear of the frame so that all copper or fibre cabling is retained within the rack enclosure; system monitoring is presented on the front panel. External monitoring via an IP network is also available if an optional BM102i or BM103 network card is fitted into a dedicated front panel slot. Both network card types are fully compatible with SNMP protocol v2.1.

The frame can now handle all card status data, which is continuously displayed on the front panel screen. The 3.8 inch, 480 x 116 pixel colour touchscreen provides a continuous, colour-coded display showing the status of the signals on each card: this has been designed to resemble the LED display of the earlier BC160 frame, for immediate familiarity. Much additional information is available on-screen, including confirmation of card type, PSU status, supply rail voltages and internal temperature. A per-slot page displays card-specific data, the nature of which depends on the card type. Another page provides information and status of an optional BM102i or BM103 network card, if one is fitted. A front panel USB port allows simple procedure for installing firmware updates from a flash drive.

Dual redundant power supplies (PSUs) are fitted as standard: each is capable of powering a frame fully loaded with any BC Series card combination. The two PSUs have independent IEC AC inlets, and employ load sharing to feed the internal electronics, so there is no interruption should one PSU fail.

The standard frame uses convection cooling and will only require the provision of vertical spacing above and below in most installations to ensure satisfactory operation.

www.bluebell.tv

Front panel display examples

Home page

Card page

Frame page

Network Monitoring

To allow a Bluebell BC card system to be fully integrated into a facility-wide monitoring environment, two optional network monitoring cards are available for the BC160i. The BM102i is a replacement for the earlier BM102 card and makes the status of all signals, cards and PSUs available as a series of simple web pages that can be viewed anywhere on the connected network using a compatible browser. The BM102i is fully compatible with third party SNMP management systems.

The BM103 is a more advanced version of network monitoring card: it provides all the monitoring functions of the BM102i, but adds wireless connectivity, faster Ethernet speeds and the capability of including image and video content in the monitoring data.

BC Series cards

The Bluebell BC Series of cards is a cost-effective and flexible modular system which facilitates the transport of various signal types over fibre-optic links, producing significant savings in cost and weight. The range is extensive with over 100 card types: cards are available to interface 4K UHD, 3G-SDI, HD-SDI, SD-SDI, DVB-ASI video, broadcast quality PAL/NTSC, MADI, AES/EBU and analogue audio, 10/100/1000baseT Ethernet and serial data with infrastructure or field-deployed fibre optic cables.

Specifications

BC160i General Specifications	
Number of card slots	6 + 1 for network card option
Power supplies	2 x 60 W, fully redundant
Power input	90 to 260 VAC, 50-60 Hz
Operating temperature range	-30 °C to +70 °C
Dimensions (w x h x d)	445 mm x 44.5 mm (1RU) x 150 mm
Weight	4.5 kg (fully-loaded)
Warranty	5 years

Conformities	
EMI/RFI	89/336/EEC, EN55022B, EN61000-4-2, EN61000-4-4 (Level 2), EN61000-4-4FTB, EN61000-4-5, EN61000-4-11
Electrical	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
RoHS	Directive 2002/95/EC

Bluebell