

# Impedance Matching Panel

## 75/120 Ohm Conversion



The 75/120 Ohm impedance-matching panel provides a solution for incompatible network interfaces by creating an interchange between twisted pair and coaxial network elements. A balun converts the unbalanced 75 Ohm impedance of a coaxial cable into the balanced 120 Ohm impedance of a twisted pair. While ensuring quality and reliability, the panel allows continuous signal transmission through otherwise incompatible interfaces. Frequently used in central office environments, this panel is often deployed by system integrators in co-location facilities.

### Features:

- Multiple high-density circuit options include a 32-circuit solution
- Panel options include all front and front/rear access panels
- Preinstalled cable support bars
- Supports signal rates up to E1 (2.048 Mbps)
- Versatile mounting brackets allow panels to fit most racks or be wall mounted

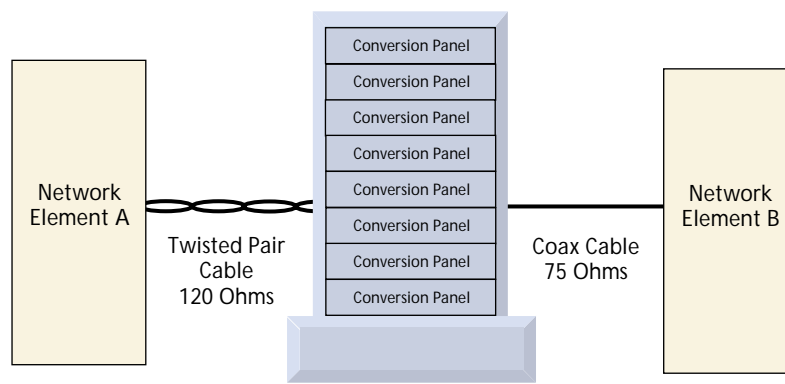


# Impedance Matching Panel

To keep pace with fast-changing technology and the need for excellent customer service, networks need to be completely flexible yet reliable. To enhance this flexibility, the impedance matching panel allows twisted pair cabling and coaxial cabling to coexist within a bay or bay lineups. A conversion must take place to transfer the signal reliably from one type of media to another. The 75/120 Ohm balun changes the impedance of a transmission line from a 75 Ohm unbalanced coaxial connection to 120 Ohm balanced twisted pair.

## Application

The impedance matching panel ensures digital signal reliability during the conversion from 75 Ohms to 120 Ohms. This panel is ideal for central office and co-location facilities where original equipment manufacturer (OEM) product interface incompatibilities frequently occur.



Impedance Matching Bay in Network

### Features and Benefits

**Panels available with 8, 16, 24, or 32 circuits**

Easily matches existing network equipment circuit counts

**Multiple connector interface type and location options**

Variety of configurations available to complement existing network designs

**Preinstalled cable management bars**

Reduces cable congestion and simplifies maintenance

**Cable management rings with labeling**

Ensures proper cable routing and circuit identification

**Reversible mounting brackets**

Each panel fits into 19-, 23-inch (48.3 or 58.4 cm) 600 mm racks, or can be wall mounted

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# Impedance Matching Panel

## Specifications

### PHYSICAL

<b>Agency Certifications:</b>	CE, CSA, UL
<b>Panel Dimension:</b>	See Dimension Chart
<b>Rack Mounting Width:</b>	600 mm, 19", 23"
<b>Housing Material:</b>	Cold-rolled 14-gauge steel
<b>Housing Finish:</b>	Powder-coated paint, putty white

### ELECTRICAL

<b>Insertion Loss:</b>	<.15 dB from 52 kHz to 5 MHz; <.2 dB from 5.1 MHz to 10 MHz
<b>Return Loss:</b>	<.22 dB from 10.1 MHz to 15 MHz; <.25 dB from 15.1 MHz to 20 MHz
<b>Insulation Resistance:</b>	1.024 MHz, -30 dB minimum; 20.0 MHz, -1.9 dB maximum 1000 Megaohms

### ENVIRONMENTAL

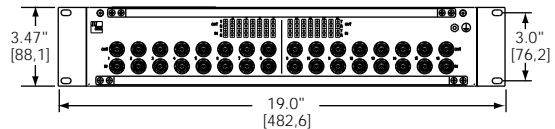
<b>Thermal Shock:</b>	-40°C to +65°C operating -55°C to +85°C non-operating
<b>Humidity:</b>	0% to 95%, non-condensing
<b>Flammability:</b>	UL-94-VO

Number of Circuits	Dimensions (HxWxD)	
	Total Front Access	Front/Rear Access
<b>8 Circuit</b>	3.47" x 19" x 2.5" (88.1 x 482.6 x 63.5 mm)	1.72" x 19" x 4" (43.7 x 482.6 x 101.6 mm)
<b>16 Circuit</b>	3.47" x 19" x 2.5" (88.1 x 482.6 x 63.5 mm)	1.72" x 19" x 4" (43.7 x 482.6 x 101.6 mm)
<b>24 Circuit</b>	5.22" x 19" x 2.5" (132.6 x 482.6 x 63.5 mm)	3.47" x 19" x 4" (88.1 x 482.6 x 101.6 mm)
<b>32 Circuit</b>	5.22" x 19" x 2.5" (132.6 x 482.6 x 63.5 mm)	3.47" x 19" x 4" (88.1 x 482.6 x 101.6 mm)

## Total Front Access Panels



16 Circuit Panel



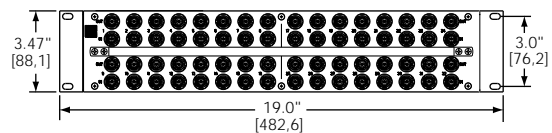
Front View

16 Circuit Panel BAL-AFAF-16

## Front/Rear Access Panels



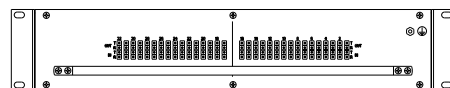
32 Circuit Front View



Front View



32 Circuit Rear View

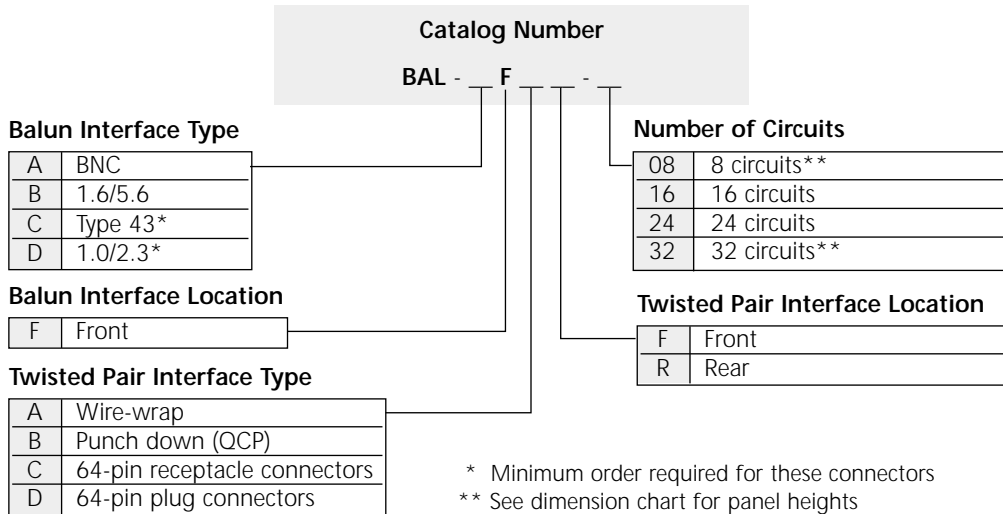


Rear View

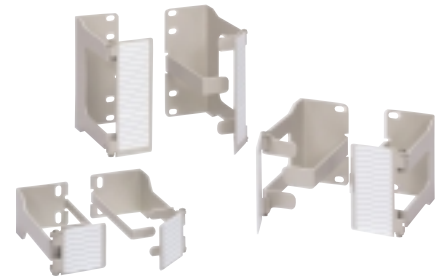
32 Circuit Panel BAL-AFAR-32

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# Impedance Matching Panel



Ordering Information	
Description	Catalog Number
Cable management accessories are ordered by panel height or bay width	
<b>Cable Management Rings</b>	
EIA bay kit includes two rings per kit and identification labels	
1.72" high panel	AUX-0X0925
3.47" high panel	AUX-0X0926
5.22" high panel	AUX-0X0927
600 mm bay kit includes two rings per kit and identification labels	
1.72" high panel	AUX-0X0928
3.47" high panel	AUX-0X0929
5.22" high panel	AUX-0X0930
<b>Cable Support Bar Kit</b>	
Cable support bar for front and rear access panels	
19" wide rack mount	AUX-0X0917
23" wide rack mount	AUX-0X0918
600 mm rack mount	AUX-0X0919
<b>Total Front Access Mounting Bracket Kit</b>	
Kit includes two brackets for mounting total front access panels into 23" EIA or WECO racks	
3.47" high panel	AUX-0X0934
5.22" high panel	AUX-0X0935
<b>600 mm Mounting Bracket Kit*</b>	
Kit includes two brackets for mounting panel in bay	
1.72" high panel	AUX-0X0933
3.47" high panel	AUX-0X0915
5.22" high panel	AUX-0X0916



\* Reversible mounting brackets are included with 19" panel except for total front access panels



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