PATTON ELECTRONICS COMPANY

PRODUCT QUICK REFERENCE

GoCard

Product Model	**450RC24**
Product Name	**Ultra High Density 24 Port E1/G.703 Telco Balun Rack**
Product Manager	**John Grant**
Contact	**Jgrant@patton.com**

Who is the customer for this product?

The E1/G.703 Balun products are primarily sold to carriers, system integrators, equipment manufacturers, and large enterprise customers. The 450RC24 allows the interfacing of E1 120Ω on 75Ω Coax without hampering the density of their equipment.

For installations that utilize either RJ48C or 64-pin Telco connections, please enquire about the Models 464RC (BNC Coax) and 466RC (1.6/5.6 Coax).

Model 450RC24 features and benefits

24 ports of 75Ω/120Ω conversion in only 1U of rack space.	The conversion of 75Ω female coax to 120Ω 50-pin Telco will allow a clean, easy and more cost effective cabling solution.
High Density 50-pin Telco Connectors	The use of the 50-pin Telco connector will allow for a high density interconnect option with the flexibility of connecting to legacy coax systems. For pin out specifications please refer to the 450RC24 manual or FAQ.
1U Compact chassis design	Higher density, 1U design takes up minimal rack space.
Reversible front panel face	Flexibility. Will allow the customer to decide which connector type needs to be front facing.
6" BNC Removal Tool	Easily install and remove BNC cables.

Primary application

The 450RC24 is used in applications that require the bi-directional conversion of 75Ω coax to 120Ω 50-pin Telco lines. The high density Patton Balun rack is particularly useful in CO (Central Office) applications. Network & Data Com equipment manufacturers are selling equipment for use in the CO's with only 120Ω Telco interfaces. This creates a mismatch with coax legacy equipment in many CO's. The 450RC24 will allow the Network & Data Com companies equipment to deliver E1 signals from the 120Ω 50-pin Telco connectors to the 75Ω coax CO equipment.

In a typical Customer Premise application, a carrier will likely terminate the G.703 line at the CP on 120Ω twisted pair or a 50-pin Telco connector. If the CP's network equipment is 75Ω coax the 450RC24 would be installed to solve this mismatch.

Ordering information

Model	Description
450RC24	High Density E1/G.703 Balun Rack; 24 Pairs of Female BNC Connector Type (75Ω), Two Female 50-pin Telco Connectors (120Ω).

Units are shipped complete with:

- 450RC24
- User manual
- 6" BNC Removal Tool

Replacement parts

NONE

Shipping/Export Information

ECCN export number: 85175010 00

Country of origin: United States of America, NAFTA

Total weight boxed: 2.36kg (5.20lbs)

Individual unit: 2.02 kg. (4.46lbs)

MTBF/Repair Information

MTBF: 284,000.000 Hrs. Calculation based on MIL-HDBK-217F, Notice 2 - "Parts Count Reliability Prediction"

Mean time to repair: 7– 10 days

Warranty: 1-year parts and labor.

Physical Specifications

Dimensions: 19" Wide X 3.5" Deep X 1.9" High (48.3 X 8.9 X 4.8 cm)

Color: Case: black. Front panel: black with white lettering. Rear panel: black with white silkscreen.

Case material: Cover: Aluminum
Base: Steel

Electrical Characteristics

Results are tested at a frequency range of 1MHz to 3MHz

Insertion Loss: Less than .3dB

Cross Talk: Between the adjacent TX and RX channels 54.4dB

Return Loss: Better than 31dB

Environmental

Operating Temp: 32 to 122°F (0 to 50°C)

Storage Temp: -40 to 185°F (-40 to +85°C)

Relative Humidity: 5 to 95% RH, non-condensing

Altitude: 0–15000 feet (3,048 meters)

Ventilation requirements: None. Units do not require cooling fans.

Approvals

Safety	Emissions	Telecommunications
CE Marked per EMC directive 89/336/EEC and low voltage directive 72/23/EEC. ESD EN61000-4-2	NONE REQUIRED	NONE REQUIRED
	EN55022 Class A	**Fully meets ITU-T (G.703) Standards**

Power Supplies

Units do not require power.