# **Installation and Operating handbook**

# PLAL2150 L Band Channel Amplifier

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EN 55022 CLASS B EN 50082-1 EN 60950



PEAK COMMUNICATIONS Ltd.
Unit 1, The Woodvale Centre, Woodvale Road,
Brighouse, West Yorkshire
HD6 4AB, England

Phone 01484 714200 Fax 01484 723666



Certificate Number 240 ISO 9001

# IMPORTANT NOTE: THE INFORMATION AND SPECIFICATIONS CONTAINED IN THIS DOCUMENT SUPERCEDE ALL PREVIOUSLY PUBLISHED INFORMATION CONCERNING THIS PRODUCT

PEAK COMMUNICATIONS Ltd maintains a continuing programme of product improvement and therefore reserves the right to change specifications without notice

### INTRODUCTION

The PLAL2150 L-band channel amplifier is a high grade **remote** unit which can be applied to many situations where good stability is required.

The unit consists of an RF strip, which is an amplifier carefully matched and filtered and a control PCB to monitor the system and provide a stable supply voltage to the amplifier.

# Options for:

(i) 10MHz reference pass through [5].

The unit is housed in a remote mountable enclosure:

Width 123mm (4.85")

Height 172mm (6.8"), plus connections & mounting flanges

Depth 48mm (1.89")

Construction Die-cast Aluminium, IP66 rated

Weight 1.4kgs (3lbs) approx

### **SPECIFICATION**

Frequency 950 - 2150 MHz

Conversion Gain 20dB±1dB,

Gain flatness  $\pm 1.5$  dB, full band,  $\pm 0.5$  dB, across any 40

MHz band within output frequency.

1 dB Compression point + 13 dBm output

3rd Order Intercept point >+25 dBm

Input connector Option 1a = N-Type (f). 50 Ohm Output connector Option 1b = N-Type (f). 50 Ohm

Operating temperature  $-25^{\circ}\text{C to } +50^{\circ}\text{C}$ 

Weight 1.3 Kg approx.

Alarms DC Power supply failure

Fail relays Form C dry contact closure

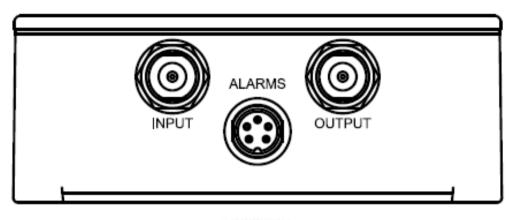
Mechanical IP66 rated die-cast enclosure

Safety Compliant to EN 60950 safety requirements

Power supply +16.5 to +35VDC

500mA max

## **UNIT DESCRIPTION**





### **Connections**

The unit has integral brackets on the box for attachment to a suitable fixture. The cables are all connected to one face which is the shorter side and the spacing of the four 5mm holes are 80mm apart and 190mm apart. The unit is cast aluminum and will break if excessive force is used.

## **Operation**

Attach the N-type feed wire carrying the RF signal to the socket marked 'RF IN'.

Output of the unit is an N-type socket marked 'RF OUT'. Check out all cables for shorts before connecting and ensure the connections are weatherproofed. The connections to the unit have a low DC tolerance and connecting DC to either input or output may cause damage.

- N/C (NORMALLY CLOSED) defined as; shorted to ground with no power, open circuit when working OK.
- N/O (NORMALLY OPEN) defined as; open circuit with no power, short to ground when working OK.

# The rating of the relay contacts is as follows;

Switch Voltage (Max)	100V
Switch Current (Max)	0.5A
Switch Power (Max)	10W
Contact resistance	$0.2 \Omega$

#### **CUSTOMER CARE**

Contact the Peak Communications support department for:

- ♣ Product operation, application support or training requests
- **♣** Information for returning or upgrading a product
- **♣** Comments or suggestions on any supplied literature

#### **Contact Information**

Peak Communications Ltd Attention: Support Department Unit 1, The Woodvale Centre Woodvale Road Brighouse HD6 4AB United Kingdom Tel. +44 (0) 1484 714200 Fax +44 (0) 1484 723666 E-mail support@peakcom.co.uk

You can also contact us via our website at www.peakcom.co.uk

To return a Peak Communications product for repair:

- 1. Contact the Peak Communications support department and request a Return Material Authorisation (RMA) number.
- 2. You will be required to provide to our support representative the model number, serial number and a detailed description of the problem.
- 3. To prevent any damage to the product during shipment we recommend that the unit is returned in its original packaging or if this is not available the packaging used must be of an equal standard.
- 4. Return the product back to Peak Communications and advise shipment details to support representative for tracking purposes. (Any shipping charges should be prepaid)