Installation and Operating handbook

PLAL2150 L Band Channel Amplifier

$C\kern-0.3em\epsilon$ **1997**

EN 55022 CLASS B
EN 50082-1
EN 60950

PEAK COMMUNICATIONS

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

Phone 01484 714200
Fax 01484 723666

ISO 9001   UKAS MANAGEMENT SYSTEMS

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:

1) 10MHz reference pass-through on the L-Band connection.

1a) 10MHz reference & DC (2A max.) pass-through on the L-Band connection.

2a) DC input connection multiplexed onto the L-Band cable replacing the wired connection to the 5-pin control interface connector.

2b) DC input connection multiplexed onto the L-Band cable as well as the 5-pin control interface connector.

2) Fail-safe by-pass switching to overcome DC PSU failure.

4a) Increased gain to 30dB nom.

4b) Increased gain to 40dB nom.

12) Low temperature operation to -40ºC

15) 5dB passive, fixed, slope compensation (L-Band only)

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 – 2150MHz
Conversion Gain	20dB±1dB,
Gain flatness	± 1.0 dB, full band, ± 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°C to +50°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
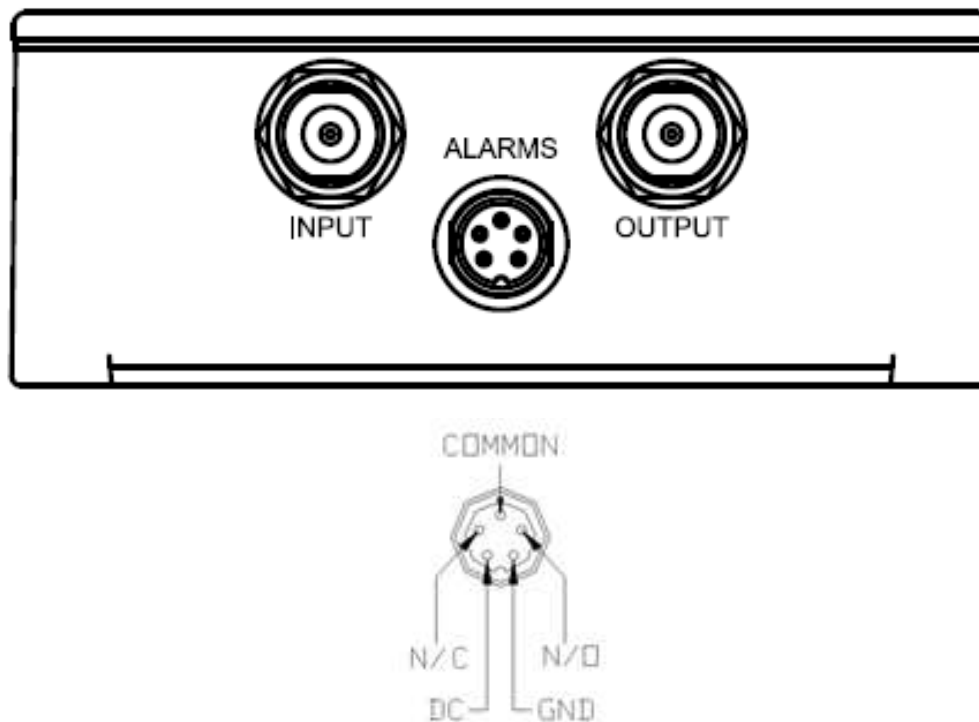
Connections

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 Ω
Operate/release	0.5 ms

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)