

PLA Series

Remote Mounted, IF (70/140MHz), L-Band & SHF Line Amplifiers.



The **PLA series** remote mounted Line Amplifier units from Peak Communications are designed to be used to overcome the losses associated with cross-site installations.






The **PLA series** units are DC powered and are constructed of high grade components to give the ultimate Gain flatness and stability performance.

The **PLA series** units utilise a sealed chassis and are designed for mounting in outdoor, exposed locations and are fully weatherproof.

PLA70	IF 70±20MHz & 140±40MHz frequencies
PLAL-1450	L-Band 950-1450MHz frequencies
PLAL-1750	L-Band 950-1750MHz frequencies
PLAL-2150	L-Band 950-2150MHz frequencies
PLAS-2400	S-Band 2.0-2.4GHz frequencies
PLAC-4200	C-Band 3.4-4.2GHz receive frequencies
PLAC-6725	C-Band 5.85-6.725GHz transmit frequencies
PLAKu-1275	Ku-Band 10.7-12.75GHz receive frequencies
PLAKu-1450	Ku-Band 13.75-14.5GHz transmit frequencies
PLAD-1840	DBS-Band 17.3-18.4GHz transmit frequencies

For other 'non-standard' frequency requirements, please contact the factory.
For equivalent rack mountable units, please see ILA, ILAH & DLA series datasheet.

Peak Features

-  High gain flatness and stability performance
-  Amplifier low current alarm monitoring
-  Rugged weatherproof housing
-  Temperature compensated for thermal stability and fast warm-up
-  Fully compatible with **RCU50** 1+1 redundancy controllers and remote switch units



PLA series - Typical Specification

Input

Frequency	
PLA70	50-200MHz
PLAL-1450	950-1450MHz
PLAL-1750	950-1750MHz
PLAL-2150	950-2150MHz
PLAS-2400	2.0-2.4GHz
PLAC-4200	3.4-4.2GHz
PLAC-6725	5.85-6.725GHz
PLAKu-1275	10.7-12.75GHz
PLAKu-1450	13.75-14.5GHz
PLAD-1840	17.3-18.4GHz

Connector	50Ω, N-Type (f)
Return loss	16dB

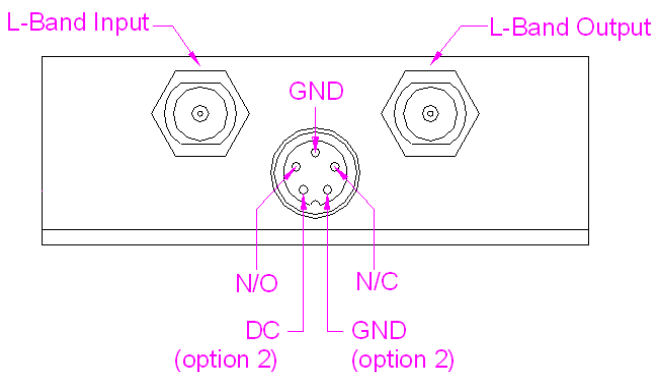
Output

Connector	50Ω, N-Type (f)
Return loss	18 to 22dB (frequency dependent)

RF Performance

Gain	20dB min
	<i>Note: for higher Gain options please contact the factory.</i>
Gain flatness	±0.25dB (bandwidths <500MHz)
	±0.5dB (bandwidths <800MHz)
	±1dB (bandwidths <1200MHz)
Active Directivity	22dB
	20dB min
RF Input power	-10dBm max (no load, no damage)
TOIP	+25dBm (+20dBm >2150MHz)
1dB Output GCP	+13dBm (+8dBm >2150MHz)
	<i>Note: for higher GCP options please contact the factory.</i>
Noise Figure	7 to 9dB (frequency dependent)

Connector panel view



Mechanical

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

Environmental

Operating temp.	-25°C to +70°C
EMC	EN 55022 part B & EN 50082-1
Safety	EN 60950

Power Supply

Voltage	+16.5 to +35VDC
Current	500mA max
Connection	Fed in on L-Band cable
Option 2a;	Fed in on 5-pin control interface connection.
Option 2b;	Fed in on the 5-pin control interface connection as well as the L-Band cable.

Control System Interface

Alarms	Summary alarm contacts
Connection	5-pin circular weatherproof (mating part supplied)

Options

- 1) 10MHz reference pass-through on the L-Band connection.
- 2a) DC input connection wired to 5-pin control interface connector, replacing the L-band feed system.
- 2b) DC input connection wired to the 5-pin 'alarms' connector, as well as the standard DC feed system via the L-Band cable.

