

## 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.

|                   |  |
|-------------------|--|
| <b>PLA70</b>      | IF 70±20MHz & 140±40MHz frequencies        |
| <b>PLAL-1450</b>  | L-Band 950-1450MHz frequencies             |
| <b>PLAL-1750</b>  | L-Band 950-1750MHz frequencies             |
| <b>PLAL-2150</b>  | L-Band 950-2150MHz frequencies             |
| <b>PLAS-2400</b>  | S-Band 2.0-2.4GHz frequencies              |
| <b>PLAC-4200</b>  | C-Band 3.4-4.2GHz receive frequencies      |
| <b>PLAC-6725</b>  | C-Band 5.85-6.725GHz transmit frequencies  |
| <b>PLAKu-1275</b> | Ku-Band 10.7-12.75GHz receive frequencies  |
| <b>PLAKu-1450</b> | Ku-Band 13.75-14.5GHz transmit frequencies |
| <b>PLAD-1840</b>  | 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         |               |
| <b>PLA70</b>      | 50-200MHz     |
| <b>PLAL-1450</b>  | 950-1450MHz   |
| <b>PLAL-1750</b>  | 950-1750MHz   |
| <b>PLAL-2150</b>  | 950-2150MHz   |
| <b>PLAS-2400</b>  | 2.0-2.4GHz    |
| <b>PLAC-4200</b>  | 3.4-4.2GHz    |
| <b>PLAC-6725</b>  | 5.85-6.725GHz |
| <b>PLAKu-1275</b> | 10.7-12.75GHz |
| <b>PLAKu-1450</b> | 13.75-14.5GHz |
| <b>PLAD-1840</b>  | 17.3-18.4GHz  |

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

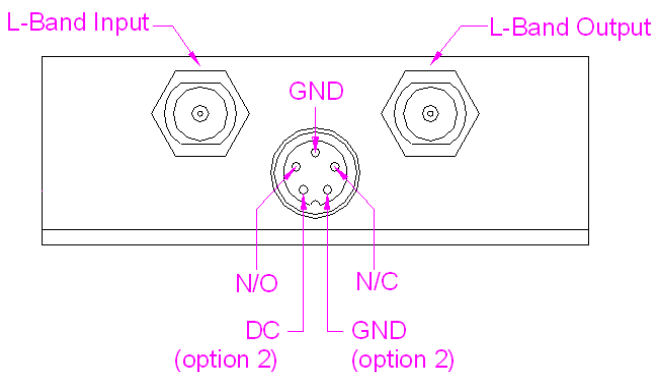
### Output

|             |                                  |
|-------------|----------------------------------|
| 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 & DC (2A max.) 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.

