

## DLAH200

### Dual, Modular, 'Hot-swappable' Variable Gain, Line Amplifier with optional 1+1 redundancy



#### Available Line Amplifier modules for the DLAH200 chassis;

<b>MLAH70</b>	IF 70±20MHz & 140±40MHz frequencies
<b>MLAHL1450</b>	L-Band 950-1450MHz frequencies
<b>MLAHL1750</b>	L-Band 950-1750MHz frequencies
<b>MLAHL2150</b>	L-Band 950-2150MHz frequencies
<b>MLAHS2400</b>	S-Band 2.0-2.4GHz frequencies
<b>MLAHC4200</b>	C-Band 3.4-4.2GHz receive frequencies
<b>MLAHC6725</b>	C-Band 5.85-6.725GHz transmit frequencies
<b>MLAHKu1275</b>	Ku-Band 10.7-12.75GHz receive frequencies
<b>MLAHKu1450</b>	Ku-Band 13.75-14.5GHz transmit frequencies
<b>MLAHD1840</b>	DBS-Band 17.3-18.4GHz transmit frequencies







For other 'non-standard' frequency requirements, please contact the factory.  
For equivalent remote mountable units, please see PLA series datasheet.

The 19-inch 1U rack mounted **DLAH200** chassis unit is designed to accept two Line Amplifier modules. Modules can be inserted/ replaced in the unit from the rear without the need to remove power or disturb the other channel in any way.

The unit incorporates a graphics display module, membrane keyboard and features a clear and intuitive control and configuration menu fully utilising the unique graphics display.

The **DLAH200** chassis units are mains powered (redundant power supplies offered as standard) and are constructed of high grade components to give the ultimate Gain flatness and stability performance.

#### Peak Features

-  High gain flatness and stability performance
-  Supports variable attenuator and 'chassis mute' options
-  Amplifier module low current alarm monitoring
-  Slope compensation options
-  Redundant Power Supplies with dual mains input
-  Integral 1+1 Redundancy option for module switching



## DLAH200 Chassis - Typical Specification

### Mechanical

Width	19", standard rack mount
Height	1U (1.75")
Depth	534mm (21"), plus connectors
Construction	Aluminium chassis
Weight	Approx. 9kgs (20lbs)

### Environmental

Operating temp	0°C to +50°C
EMC	EN 55022, part B & EN 50082-1
Safety	EN 60950

### Power Supply (2off in redundant configuration)

Voltage	90-264VAC
Frequency	47-63Hz
Total power	50 Watts typ.

### Control System Interface

Local interface	Graphics display & keypad
Remote control	RS232/ 485 port
Option 9;	Ethernet; embedded web server & SNMP network management support
Alarms	PSU fail Amplifier current detection

### Integral 1+1 'Module' Redundancy (Option 6)

Connections	SMA (f), 50Ω
Switching speed	<150ms (from fault to switch completion)
Switch isolation	>60dB input to output
Option 13;	Output 'chassis mute' facility (>80dB)
Cables	Includes high grade rear panel links

Note; the connection to the internal redundancy circuitry is made via SMA (f) RF links on the rear panel, this allows for by-pass wiring should the need arise. High grade co-axial linking cables are provided.

### 10MHz Reference Pass-through (Option 5)

Option 5a	Allows 10MHz reference fed into the unit (multiplexed onto input connection) to 'pass-through' to output (L-Band only) for use with option 6, fitted between system input and output connections
Option 5b	for use without option 6, fitted between module input and output connections

## DLAH Options

- 5a) 10MHz reference pass-through (with option 6)
- 6) Integral 1+1 redundancy module switching
- 9) Ethernet interface with embedded web server & SNMP, replaces RS232/485 port
- 13) Output 'chassis mute' facility (only available with option 6)

Notes; the addition of options can modify the typical specification, for details please consult the factory



## MLAH Modules - Typical Specification

### Input

MLAH70;	50-200MHz
MLAHL1450;	950-1450MHz
MLAHL1750;	950-1750MHz
MLAHL2150;	950-2150MHz
MLAHS2400;	2.0-2.4GHz
MLAHC4200;	3.4-4.2GHz
MLAHC6725;	5.85-6.725GHz
MLAHKu1275;	10.7-12.75GHz
MLAHKu1450;	13.75-14.5GHz
MLAHD1840;	17.3-18.4GHz

### Connector

SMA (f), 50Ω	
Option 1a;	N-Type (f), 50Ω
Option 1c;	BNC (f), 50Ω (<2150MHz only)
Option 1e;	BNC (f), 75Ω (<2150MHz only)
Option 1g;	F-Type (f), 75Ω (<2150MHz only)

Notes; some connector options may lower the overall unit performance.

F-Type performance cannot be guaranteed.

Return loss 16dB

### Output

Connector	SMA (f), 50Ω
Option 1b;	N-Type (f), 50Ω
Option 1d;	BNC (f), 50Ω (<2150MHz only)
Option 1f;	BNC (f), 75Ω (<2150MHz only)
Option 1h;	F-Type (f), 75Ω (<2150MHz only)

Notes; some connector options may lower the overall unit performance.

F-Type performance cannot be guaranteed.

Return loss 18 to 22dB (frequency dependent)

### RF Performance

Gain	20dB min 30dB nom 40dB nom
Option 4a;	
Option 4b;	

Note; for other gain requirements please contact the factory

Adjustment; 30dB range, 0.1 or 0.5dB steps

Gain flatness ±0.25dB (bandwidths <500MHz)

±0.5dB (bandwidths <800MHz)

±1dB (bandwidths <1200MHz)

Active directivity 22dB typ., 20dB min

RF input power -10dBm max (no load, no damage)

TOIP +25dBm (+20dBm >2150MHz)

1dB output GCP +13dBm (+8dBm >2150MHz)

Note; for higher GCP options please contact the factory.

Noise figure 7 to 9dB (frequency dependent, at min atten)

### Monitor Ports (Option 2)

Option 2a;	Input monitor
Option 2b;	Output monitor
Connector	SMA (f), 50Ω, on rear panel
Level	-20dBc ±3dB

### Slope compensation (Option 15)

Provides linear positive slope compensation of nominally 5dB across the full L-Band range (950-2150MHz), to compensate for internal circuitry & external primarily cross-site L-Band cables.

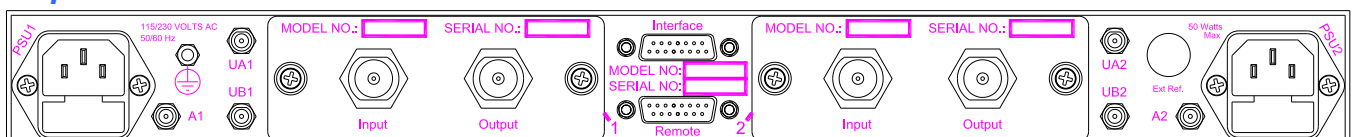
Note; unit options chosen will determine 'surplus' available for external compensation (for details contact factory).

## MLAH Options

- 1a) N-Type (f), 50Ω MLA module input connector
- 1b) N-Type (f), 50Ω MLA module output connector
- 1c) BNC (f), 50Ω MLA module input connector
- 1d) BNC (f), 50Ω MLA module output connector
- 1e) BNC (f), 75Ω MLA module input connector
- 1f) BNC (f), 75Ω MLA module output connector
- 1g) F-Type (f), 75Ω input interface connection
- 1h) F-Type (f), 75Ω output interface connection
- 2a) -20dBc input monitor on rear panel
- 2b) -20dBc output monitor on rear panel
- 4a) higher gain to 30dB nom
- 4b) higher gain to 40dB nom
- 5b) 10MHz reference pass-through
- 7) Variable gain, 30dB range, 0.1 or 0.5dB steps
- 15) 5dB slope compensation (L-Band only)

Notes; the addition of options can modify the typical specification, for details please consult the factory

## Rear panel view



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. DLAH200-210218.

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