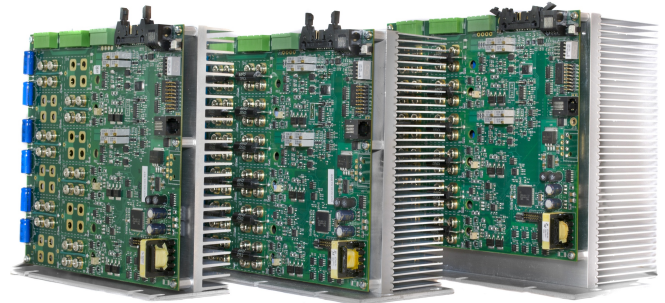


Model	Current Cont./Peak	Power Cont./Peak	± VDC Bus Voltage
<b>LALD-415</b>	5/15A	400/1800W	±12 - ±150VDC
<b>LALD-525</b>	15/25A	500/1900W	±12 - ±150VDC
<b>LALD-535</b>	15/35A	500/3800W	±12 - ±150VDC
<b>LALD-825</b>	15/25A	800/1900W	±12 - ±150VDC
<b>LALD-835</b>	15/35A	800/3800W	±12 - ±150VDC
<b>LALD-1525</b>	15/25A	1500/1900W	±12 - ±150VDC
<b>LALD-1535</b>	15/35A	1500/3800W	±12 - ±150VDC



## Details

The LALD series Linear Servo Amplifiers are the next generation of high-performance motion products from Varedan Technologies. They are the good choice for systems requiring low radiated noise, zero distortion and low drift from the drive electronics.

There are two fundamental problems we set out to solve with the LALD series. The first was creating an amplifier with small current drift due to thermal changes. Using precision components and precision tuning, the LALD series achieves 100X improvement in thermal current drift (~0 Amps).

The second was addressing the trade-off between range vs. resolution. Simply put, applications requiring high current ranges will lose resolution at lower currents. The LALD series employs two independent current feedback paths allowing one to be scaled for fast acceleration/deceleration (high current ranges) and the second to be scaled for lower speed (low current) precision moves. This gives both worlds; high peak current range and accurate low current resolution that is transparent to the controller.

The design of these amplifiers includes an on-board high-speed DSP that monitors all key system functions in real time, and provides protection for the outputs by limiting output power to a "Safe Operating Area". An intelligent user interface allows setup and storage of all system parameters via the serial interface. Non-volatile memory provides storage of the parameters during power off conditions.

## Features



- Linear Output Control for quiet operation
- Low Current Drift
- Dual Independent feedback Paths for High Peak Current Ranges and High Low Current Resolution
- Multiple Power Levels Share Common Interface
- Single-Phase and Three-Phase Versions
- Safe Operating Area Protection of Power Devices
- Approach zero Crossover Distortion
- Over Current Protection
- Over Voltage Protection
- Up to 10kHz Bandwidth
- Non-volatile Storage of All System Parameters
- RS-232 Serial Communications Interface
- 7-Segment Display Shows Status in Real-Time

**OUTPUT CONNECTIONS**

Motor Phases A, B, C (3-phase)  
 Motor Phases A,B (Single Phase)  
 Motor Currents (A,B,C Current Monitor)  
 Fault (0-5VDC)  
 RS232 - Transmit

**INPUT CONNECTIONS**

Command A, ±10V, Single-Ended or Differential  
 Command B, ±10V, Single-Ended or Differential  
 Enable (0-5VDC)  
 Reset (0-5VDC)  
 RS232 - Receive

**COMMUTATION**

3-Phase External 2-Phase Sinusoidal, ±10V Analog Input  
 Single-Phase Current, ±10V Analog Input

**BANDWIDTH**

10kHz Maximum

**INDICATORS**

7-Segment LED for system status

**MECHANICAL**

Dimensions	LALD-415	7.50" x 8.00" x 2.612
	LALD-525/540	7.50" x 8.00" x 2.612"
	LALD-825/540	7.50" x 8.00" x 3.871"
	LALD-1525/540	7.50" x 8.00" x 4.871"
Weight	LALD-415	3.6 pounds
	LALD-525/540	4.6 pounds
	LALD-825/540	7.8 pounds
	LALD-1525/540	9.8 pounds

**PROGRAMMABLE SETTINGS**

RMS Overcurrent Trip Level  
 RMS Overcurrent Trip Time  
 Absolute Overcurrent Trip Level  
 Enable Level  
 Enable Source  
 Fault Output Level

**FAULT PROTECTION**

Safe Operating Area  
 Overcurrent  
 RMS Overcurrent  
 Bus Overvoltage  
 Bus Undervoltage  
 ±15V Bias Supply  
 Amplifier Over Temperature  
 Internal 5V Supply  
 DSP Error  
 NVM Error

**ENVIRONMENTAL LIMITS**

0 to 70 deg. C Ambient  
 -40 to 85 deg. C Storage  
 5 to 95% Relative Humidity. Non-condensing.

**POWER REQUIREMENTS**

±15vdc Bias Supply @600mA per side  
 ± DC Motor Bus Supply

**DRIFT SPECIFICATION**

100uA/Deg C Normal Current Range\*  
 10uA /Deg C Low Current Range\*  
 \*Measured on LALD-810T-01-01-01

**OPTIONS**

VMC2 Motion control card

Varedan Technologies warrants this product to be free from defects for a period of one year after the date of shipment and according to the Terms and Conditions of Sale.