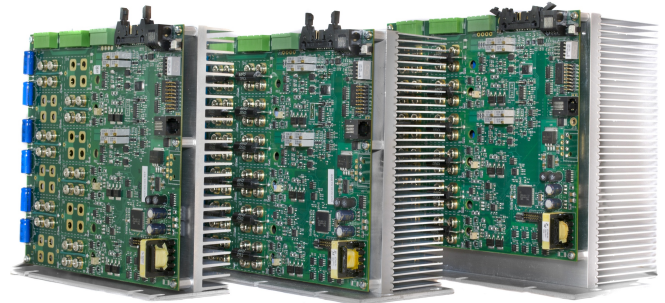


Model	Current Cont./Peak	Power Cont./Peak	± VDC Bus Voltage
LALD-415	5/15A	400/1800W	±12 - ±150VDC
LALD-525	15/25A	500/1900W	±12 - ±150VDC
LALD-535	15/35A	500/3800W	±12 - ±150VDC
LALD-825	15/25A	800/1900W	±12 - ±150VDC
LALD-835	15/35A	800/3800W	±12 - ±150VDC
LALD-1525	15/25A	1500/1900W	±12 - ±150VDC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