



LINEAR BRUSH SERVO AMPLIFIER LCAM 5/15

Revision: 4/1/21



H2W offers the latest in high performance Linear Brush Servo Amplifiers for the control of both DC brush servo motors and voice coil motors. With extensive utilization of surface mount technology and special heat transfer techniques, H2W's Linear Brush Servo Drives offer one of the world's most powerful products for a given form factor. All models can operate in current (torque) or velocity (RPM) mode and accept a +/-10 VDC analog input as a command reference. All models can close the velocity loop via feedback of a DC tachometer. Output current is 5 amps continuous, 15 amps peak. Operating voltages range from either 24 to 75 VDC for the module and 17 to 53 VAC for the multi-axis configuration. These drives are best suited for low inertia applications that require high bandwidth, low noise, and zero crossover distortion and for motors or voice coils that require high current loop bandwidths.

Electrical Specifications								
Model Number	Input Voltage		Continuous Current (A)	Peak Current (A)	Power Dissipation (W) ⁽²⁾	Available Package Configurations		
	VDC	VAC				Module	Stand Alone	Multi-Axis
LCAM 5/15 ⁽¹⁾	24-75	17-53	5	15	250	•		•

Notes: ⁽¹⁾ With external forced-air cooling (Only Module). ⁽²⁾ At ambient temperature (25°C).

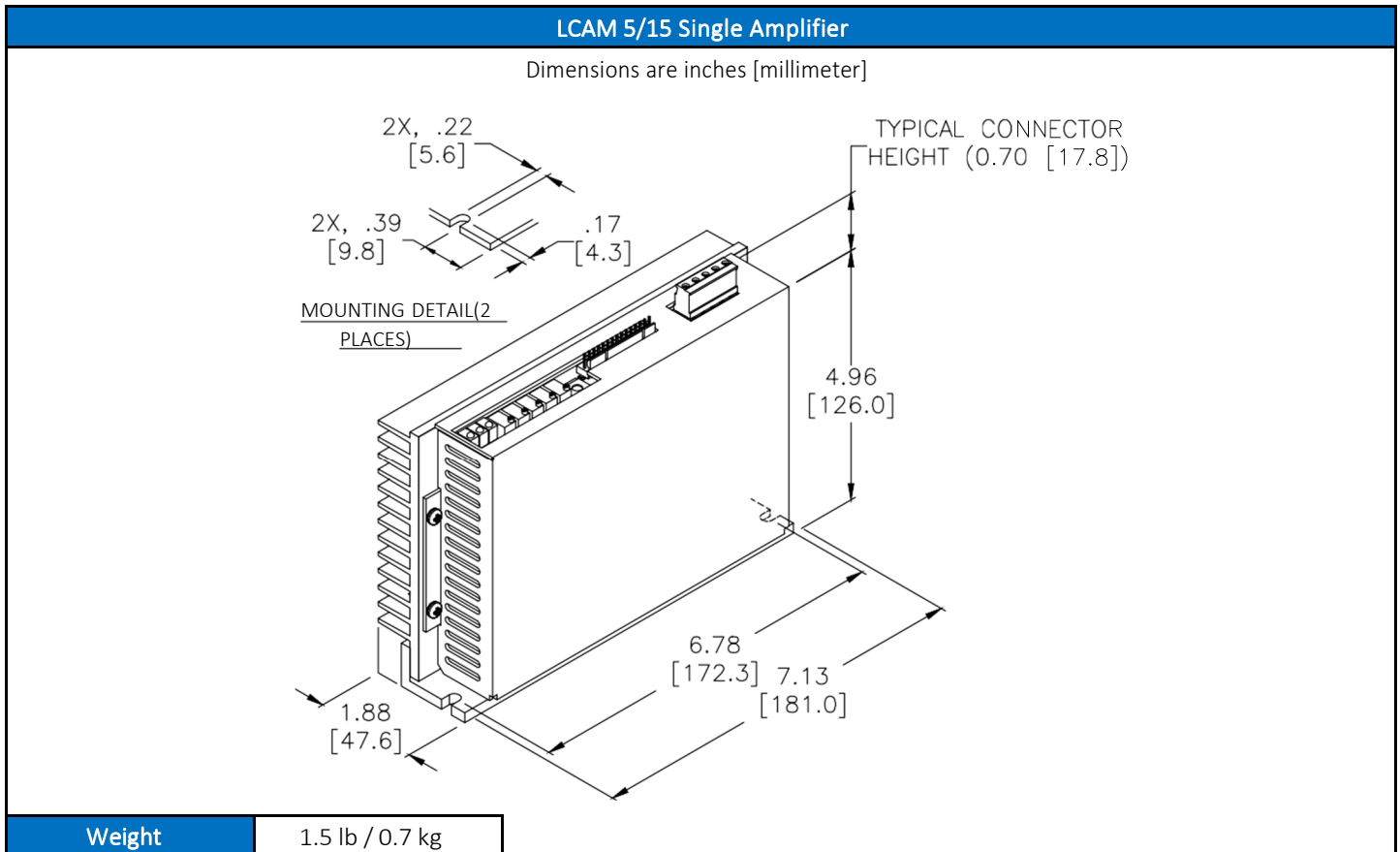
Command/Control Modes
+/-10 VDC for current (torque)
+/-10 VDC for velocity (RPM)
Feedback
DC Tachometer
Dedicated Inputs
Dedicated Inputs: +/- Limits, inhibit, fault, and reset



Performance	
Multimode operation	All models can operate in current (torque) or velocity (RPM) mode and accept a +/-10 VDC analog input as a command reference.
Linear output stage	Provides high bandwidth, low noise, and zero crossover distortion.
Bandwidth	All servo drives have a nominal 10kHz current loop bandwidth which varies with the motor inductance. Higher bandwidths are available upon request.
Fault protection	Short from output to output, short from output to ground, drive RMS over current and drive over temperature.
Heat dissipation	(@ 25°C): 250 Watts continuous for the SMA5005.
External fault reset	An input is provided to reset the drive in the event of a fault.
Current limit	Peak motor current is adjustable.
Dedicated Inputs	
Dedicated Inputs	+/- Limits, enable, fault, and reset.
Input	
Wide operating voltage	Operating voltages range from either 24 to 75 VDC for the SMA5005 module or 17 to 53VAC for the multi-axis configuration.
Build	
Ergonomic design	Easy access to connections, adjustments, and test points.
Industry standard mounting	Available in a module and multi-axis configuration. H2W offers custom mounting configurations to meet virtually any requirement.
Status indicator	7-segment display indicates drive status.

Conditions	
Storage Temperature: -40°C to 80°C	
Operating Temperature:	Standard: 0°C to 40°C without current derating, up to 50°C with 25% current derating Special: -40°C to 40°C without current derating, up to 50°C with 25% current derating
Humidity: 5% to 95% relative humidity, non-condensing	
Altitude: Up to 1000m without derating, derate current 10% per 1000m above 1000m	

Configurations	
Single Amplifier	This option consists of a single amplifier, without a DC bus power supply. This option offers the smallest mechanical form factor and is a very cost-effective solution for single and multi-axis applications where the customer provides DC bus power supply and forced-air cooling.
Multi-Axis	This option consists of a servo amplifier with a DC bus power supply, external bias voltage power supply and cooling fans. Available in 2 and 4 axis packages.

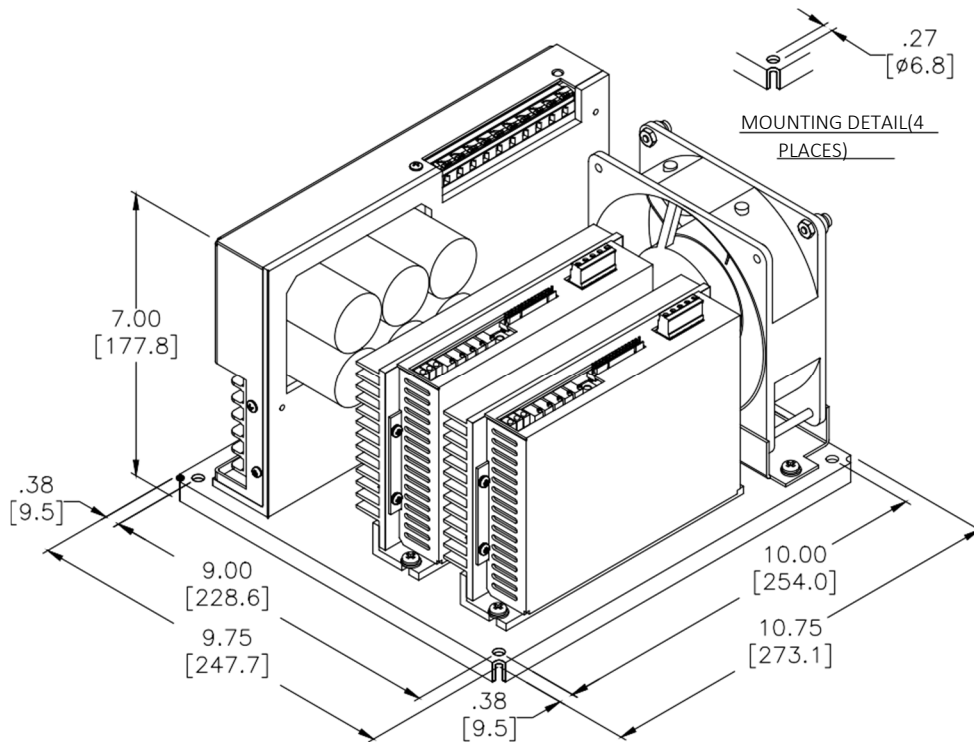


Custom single amplifier configuration. Shown with DC bus power supply and mounted to chassis panel.



LCAM 5/15 2-Axis

Dimensions are inches [millimeter]



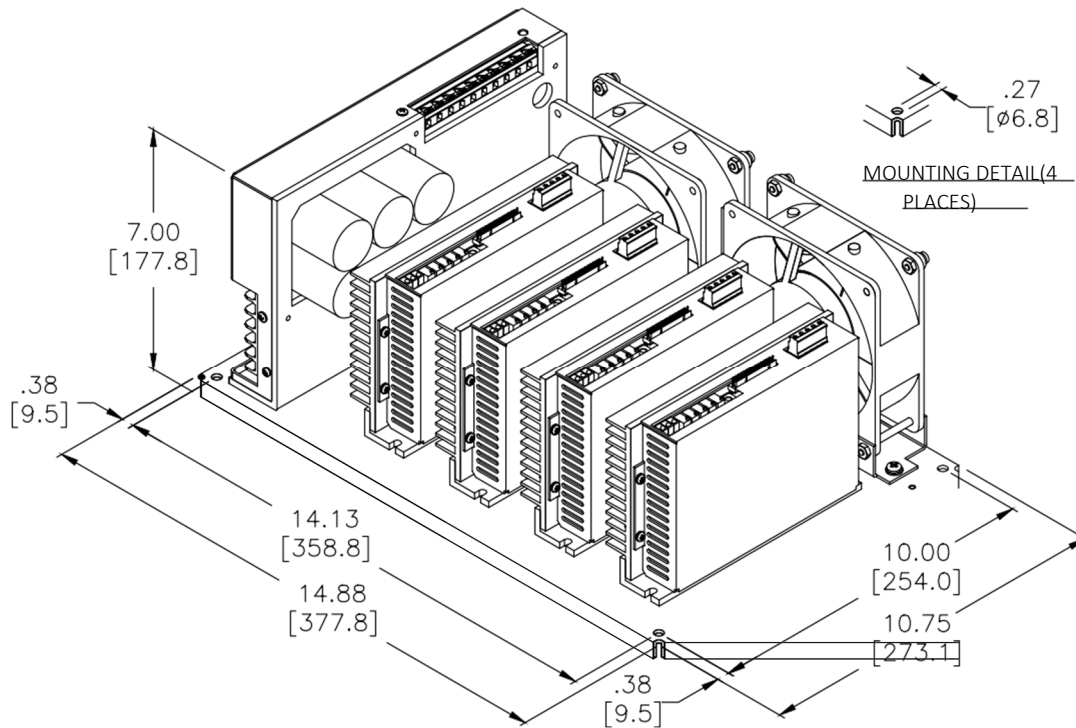
Weight

9.5 lb / 4.3 kg



LCAM 5/15 4-Axis

Dimensions are inches [millimeter]



Weight

15.1 lb / 6.7 kg

Custom 4-Axis configurations.

