

## DC SERIES, DIGITAL SERVO DRIVERS

# SELF-CALIBRATING, STATE-SPACE SERVO DRIVERS FOR APPLICATIONS DEMANDING HIGH SPEEDS

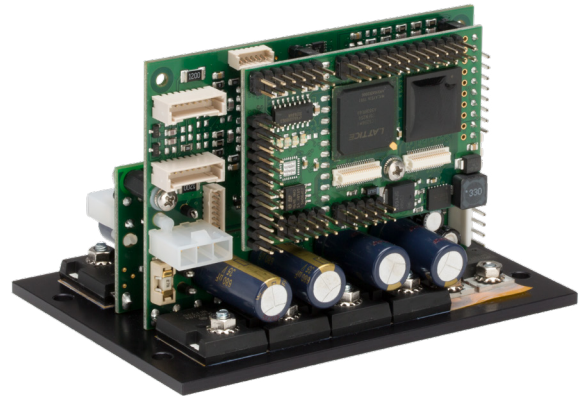
Novanta develops photonics solutions through our globally recognized brands— ARGES, Cambridge Technology, Laser Quantum and Synrad— specializing in cutting-edge components and sub-systems for laser-based diagnostic, analytical, micromachining and fine material processing applications. Powerful lasers, coupled with advanced beam steering and intelligent sub-systems incorporating software and controls, deliver extreme precision and performance, tailored to our customers' demanding applications.

## OPTICAL SCANNING

Cambridge Technology's digital servo drivers feature self-calibration, state-space control, and command input optimization, features that are ideal for scanning applications demanding the highest speeds and accuracy.

The drivers' patented technology delivers maximum system performance, flexibility, and ease of use with on-board processors that characterize the scanning components every time you turn on the system.

For ease of integration, our compact DC Model servos include flexible power supply configurations, integral mounting hardware, and low-profile connectors.



## EASY TO INTEGRATE, HIGH-PERFORMING SERVOS

- Simulation-based, pre-filtering algorithms for optimization of motion control
- Self-tuning and start-up calibration provide reduced system manufacturing cost
- Simplified field service increases savings and system up-time
- Compact, flexible servo footprint is easy to configure within complex systems
- Fully-optimized performance with Cambridge Technology scanning products



Additive Manufacturing



Converting & Marking

## DC SERIES, DIGITAL SERVO DRIVERS

Specifications	DC3000 Plus (low noise)
Number of Axes	Dual
Command Input	XY2-100 High Speed Serial Digital
Analog Input Impedance	—
Analog Output Impedance	The un-terminated output of OPA2227, < 1Ω
Position Input Scale Factor	—
Analog Position Input Range	—
Position Output Scale Factor	0.333V/degree non-differential
Power Supply Requirements	+/-15 to +/-28VDC configurations available
Maximum Drive Current Limit	20 amps peak, 5 amps rms (per axis) (power supply and load dependent)
Quiescent Power	11.5W
Dither (RMS)	4 μrad
Operating Temperature Range	0 - 50°C
Dimensions <sup>1</sup>	10.50 cm x 7.50 cm x 6.44 cm

**Notes:**

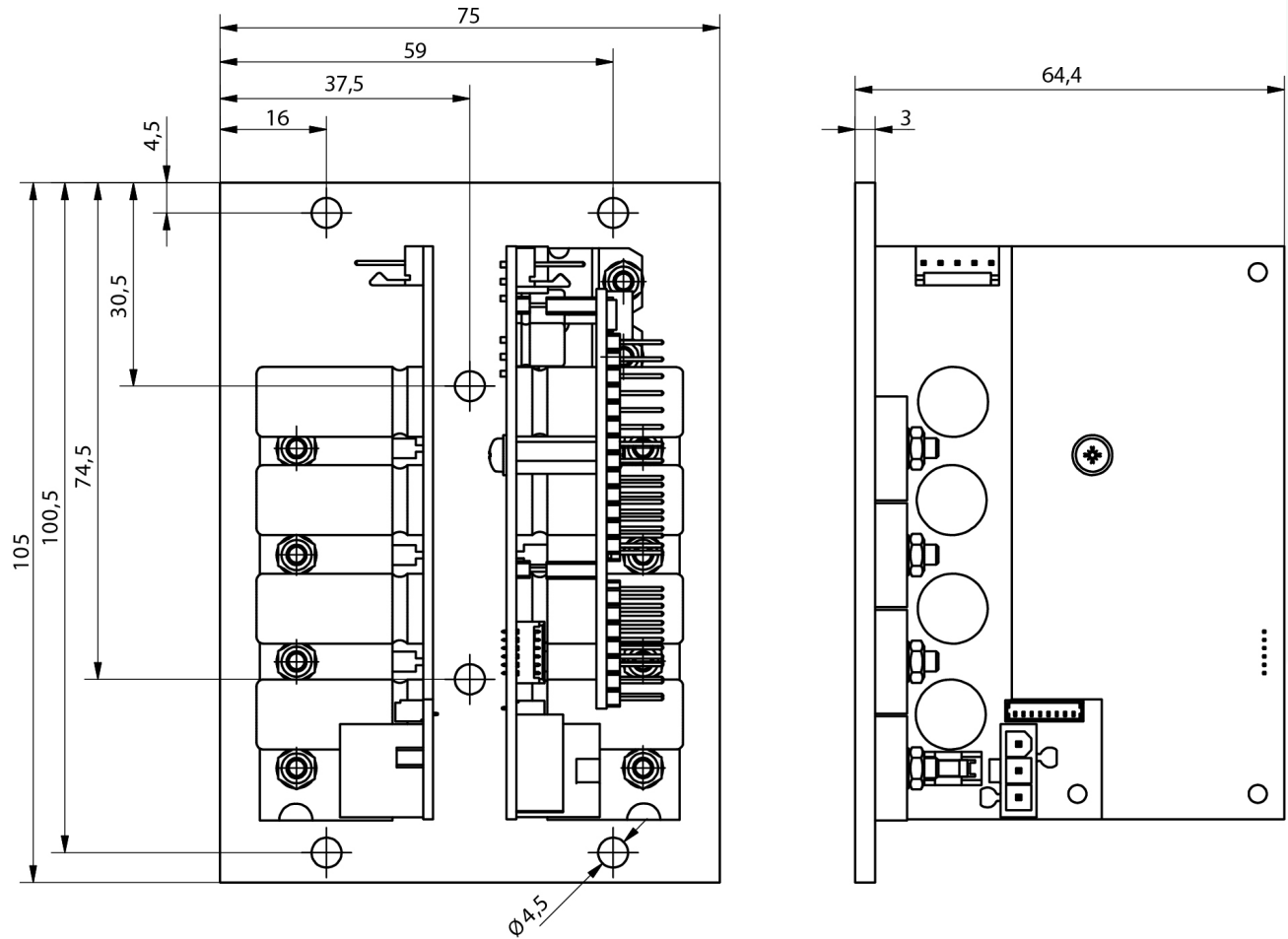
All angles are in mechanical degrees, unless otherwise noted. Dimensions are in millimeters. All specifications are subject to change without notice.

**References:**

1. Dimensions include standard, single-module heatsink bracket.

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## DC3000 PLUS MODEL



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