

FEATURES

- All-In-One, Precision, Direct-Drive Motion
- Class-Leading Positional Accuracy and Repeatability
- Ultra Smooth and Silent
- Zero Backlash
- Low Size, Weight and Power
- 2.0Nm Output Torque
- Exceptional Repeatability



Compact, Smooth and Accurate Motion for Advanced Sensor Positioning

The most powerful of the **Servotorq** series of Integrated Servo Motors and designed for applications requiring exceptional positional accuracy and repeatability, **Atlas** delivers ultra-smooth, fast, silent and precise motion in a standalone package. Its compact footprint makes it ideal for integration in to a wide variety of sensor position applications including high performance and environmentally rugged cameras, radars and laser scanners.

Fully Integrated Solution

Eliminating the need for a separate motor, servo controller and cabling, Atlas combines a BLDC motor, advanced control electronics, a high-performance servo and a precision rotary position encoder into a fully integrated, direct-drive, motion control solution.

Easy Integration

Atlas has been designed with simplicity for the integrator in mind and supported by its simple connectivity via a standard I²C interface and supply voltage, significantly reduces product development effort and overall system costs, which means that time-to-market and production efficiencies can be significantly improved for the integrator. Atlas's compact design also supports integrators in the design of simpler and more attractive end products.

Best in Class Performance

Atlas has a wide dynamic speed range of between 0.05°/s and 450°/s. Integrated drive control electronics and software provide closed-loop servo control, delivering velocity and acceleration control. Atlas also provides rapid and precise positional control, with 0.0055° repeatability and zero backlash, and is robust to external dynamic disturbances, especially impulses and vibrations.

Technical Specification

Part Number	OVU00247
Electrical Specifications	
Nominal Voltage	48V DC
Current at max torque @ 48V	1.12A
Initialisation Current	1.12A
Idle, no load, current	30mA
Position command & readback resolution	0.0055°
Maximum speed	450°/s
Min. non-zero speed	0.05°/s
Mechanical Specifications	
Weight	1.2kg
Dimensions (Dia. x H)	125.2mm x 98.5mm
Rotor moment of inertia	12,000gcm ²
Stall torque	2.0Nm
Moving Torque (at 360°s ⁻¹)	1.7Nm
Perpendicularity	<+/-0.5°
Maximum radial load	550N
Maximum axial load	550N
Bearing Type	Deep groove ball bearing (sealed)
Rotation Range	Software configurable for continuous or limited rotation
Hollow Spindle bore internal dia.	16.5mm
Environmental Specifications	
Operational Temperature Range	-20°C to +70°C
Humidity Range (Standard Operation)	5% to 90% RH (non-condensing)

Note: Specifications subject to change without notice.

Atlas is part of the Servotorq series of Integrated Servo Motors, designed, developed & manufactured by Overview Ltd. Other models in the range include: Juno™, Titan™, Leto™, Miranda™ and Artemis™.

Mouser Electronics

Authorized Distributor

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