

## 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 I<sup>2</sup>C 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
<b>Electrical Specifications</b>	
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
<b>Mechanical Specifications</b>	
Weight	1.2kg
Dimensions (Dia. x H)	125.2mm x 98.5mm
Rotor moment of inertia	12,000gcm <sup>2</sup>
Stall torque	2.0Nm
Moving Torque (at 360°s <sup>-1</sup> )	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
<b>Environmental Specifications</b>	
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 and manufactured by Overview Ltd. Other models in the range include: Juno™, Titan™, Leto™, Miranda™ and Artemis™.

