

Servotorq™ iBLDC Intelligent Drives

KEY FEATURES

- Unique family of solutions for direct drive
- Designed in the UK
- In-built intelligent control and drive electronics
- Fast, smooth and silent operation
- Outstanding positional repeatability
- Zero backlash
- Long life
- Low power



Models: Atlas™, Titan™ and Leto™

Servotorq™ is an innovative range of intelligent Brushless Direct Current, (iBLDC) drives designed for the CCTV, video conferencing, broadcast TV and defence industries.

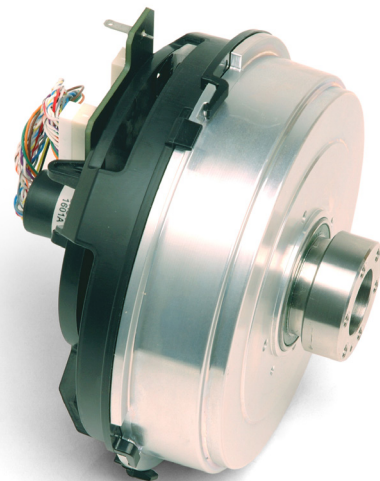
Servotorq™ is an innovative range of brushless direct current motors, designed by Overview specifically for applications requiring the precise positioning of sensors such as cameras. There are currently three model variants in the product family – Atlas, Titan and Leto.

Titan™ was developed to drive the next generation of discrete surveillance domes and video conferencing cameras. Its small size, silent operation and outstanding positional accuracy make it ideal for video conferencing cameras and small PTZ surveillance cameras.

Leto™ provides twice the torque available from Titan whilst maintaining the same footprint and features. It has been developed for platforms with larger camera modules, i.e. 4k variants with their large lens assemblies, which require more torque than Titan can provide in order to move and control the heavier loads accurately.

Atlas™ is a physically larger variant of the Titan design, providing approximately 50 times more torque. It offers the same near silent, smooth, fast and accurate operation as Titan. Atlas is capable of moving much larger payloads such as dual head camera platforms, rugged camera enclosures with integrated illuminators and many other applications requiring a smooth, fast and highly accurate positioning platform.

The Servotorq™ architecture incorporates control and drive electronics into the motor itself, allowing users to integrate a high-performance positioning system into their product with a minimum of development effort. All three drives share the same comprehensive control protocol, and simply require DC power and an I2C communications link for control data. Overview supplies tools and support for integrating and using the entire iBLDC drive family in a wide variety of custom applications.



Model: Atlas™

Technical Specification

Product Name	Titan™	Leto™	Atlas™
Electrical Specifications			
Nominal Voltage	12V DC	24V DC	48V DC
Current at max torque (at nominal voltage)	510mA	600mA	1.12A
Initialisation Current	600mA	600mA	1.12A
Idle, no load, current	90mA	45mA	30mA
Position command and readback resolution	0.0055°	0.0055°	0.0055°
Maximum speed	720°/s	720°/s	450°/s
Min. non-zero speed	0.05°/s	0.05°/s	0.05°/s
Mechanical Specifications			
Weight	96g	96g	1.2kg
Rotor moment of inertia	140gcm ²	140gcm ²	12Kgcm ²
Stall torque	40mNm	80mNm	2.0Nm
Moving Torque (at 360°s ⁻¹)	36mNm	72mNm	1.7Nm
Perpendicularity	<+/-0.5°	<+/-0.5°	<+/-0.5°
Maximum radial load	102N	102N	550N
Maximum axial load	19N	19N	550N
Bearing Type	Deep groove ball bearing (shielded)		Deep groove ball bearing (sealed)
Rotation Range	Software configurable for continuous or limited rotation range		
Index Position	Limited rotation: configurable, relative to mechanical end-stop. Continuous rotation: configurable relative to index sensor position		Configurable relative to mechanical end-stop (limited rotation only) or index sensor position
Rotor & Stator Mounting Faces	Opposite sides of motor		Same side of motor
Hollow Spindle bore internal diameter	8mm	8mm	18mm
Environmental Specifications			
Operational Temperature Range	-20°C to +70°C		
Humidity Range (Standard Operation)	Up to 95% (non-condensing)		

Note: Specifications subject to change without notice.

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