

OEM 750 Series



A Pioneer in Microstepping

Incorporated in 1979, Compumotor earned its reputation for innovation by pioneering microstepping drive techniques to improve the smoothness and resolution of step motor control systems. With technology enhancements and field experience, Compumotor offers the OEM750 Series, a compact microstepping drive that provides big performance in a small package.

Performance

All step motors are subject to mid-range instability, also referred to as parametric oscillations. Several problems are associated with these oscillations. They can cause the motor to stall, and thus cause the user to include a margin (typically at least 50%) of extra torque to overcome the oscillation. The OEM750 Series incorporates a subset of the electronic damping circuitry used in the highly-acclaimed ZETA Drive. This feature suppresses these oscillations, allowing the torque formerly reserved for safety margin to be used to do useful work, thus taking advantage of the full capabilities of the step motor.

OEM750 Series Benefits:

- Minimizes stall condition
- Increases usable torque
- Higher accelerations

Since the OEM750 Series is capable of operating from 24 to 75 VDC, while operating motors with a wide range of winding inductances, Compumotor incorporated current loop gain techniques to optimize motor performance. The loop gain adjustment is designed to maximize your system's (drive, motor, and voltage) performance. Control over the current loop gain allows customers to take advantage of the motor's capable torque and reduces audible noise and excessive heating of the motor. This gives users more choices when selecting a motor and the opportunity to pick the best motor for their application.

OEM750 Series Benefits:

- Optimizes motor performance
- Reduces audible noise
- Reduces motor heating

Packaging

The OEM750 Series combines Application Specific Integrated Circuit (ASIC) and surface mount technology to minimize the product's footprint, minimize overall package size, and increase product reliability.

Reliability

At Compumotor, producing reliable, quality products is our number one priority. Our OEM750 Series is designed with high-quality standards and manufactured with state-of-the-art equipment and production methods. Before any product reaches our customers, it must pass a rigorous set of hardware and software tests. Today, Compumotor uses Highly Accelerated Life Testing (HALT) to uncover the product's vulnerabilities, in order to produce a robust and reliable product. JIT (Just-In-Time) manufacturing and DFM (Design-For-Manufacturability) methods lend themselves well in creating the necessary flexibility to readily accommodate your special needs.