

ESCON Module 50/5—the miniaturized OEM plug-in Module of maxon motor control's Servo Controller Series

Straightforward commissioning, excellent motor control characteristics, and peak performance.

As addition to the new ESCON servo controller family, maxon motor introduces a miniaturized OEM plug-in module; the ESCON Module 50/5. The compact, powerful 4-quadrant PWM servo motor controller offers efficient control of permanent-magnet brushed and brushless DC motors with Hall sensors up to approximately 250 Watts. As part of the ESCON series it stands for high usability, exceptional performance, and unprecedented power density controller technology. Its built-in comfort, functionality, protection, and performance are hard to beat.

The powerful OEM plug-in module has excellent control properties and a very fast digital current controller with an enormous bandwidth for optimal motor current/torque control. The drift-free yet extremely dynamic speed behavior enables a speed range of 0 to 150,000 rpm. It offers a wide range of functions with fully configurable digital and analog inputs and outputs and can be run in various motion control operating modes (speed controller (closed & open loop), current controller). And it perfectly matches maxon's range of motors and thus allows dynamic drive solutions that meet the highest demands. Thereby, it fully integrates into complex applications with little effort.

This with a distinctive benefit: Customers can fully focus on their main task; the development of their own device. For the motor control part they can make use of maxon motor's vast drive know-how already built into the ESCON Module. An in-detail Motherboard Design Guide is available for integration to OEM PCBs and a suitable motherboard makes initial commissioning a simple task.

The compact DC servo controller is controlled by means of an analog set value. This value can be specified by means of analog voltage, an external or internal potentiometer, a defined value or by means of a PWM signal with variable duty cycle. Other interesting functions are the ability to enable or disable the power stage depending on the direction of rotation or to use speed ramps for acceleration and deceleration. The speed can be regulated by means of a digital incremental encoder (2-channel, with/without line driver), DC tachometer or Hall sensors.

Startup made easy

The servo motor controller has been designed specifically with easy startup and user-friendliness in mind. Hence, no in-depth knowledge of drive technology is required. Additionally available is a motherboard for easy initial commissioning of the ESCON Module 50/5.

When connected to a PC via a USB port, the servo motor controller can easily and efficiently be configured with the graphical user interface «ESCON Studio». A large variety of functions, user-friendly software wizards, and a well-designed automatic procedure to fine-tune the controller come in handy during startup and configuration of the inputs and outputs, for monitoring, data recording, and diagnostics.

Top-notch protection

The ESCON Module 50/5 features protective circuits against overcurrent, excess temperature, under-voltage and over-voltage, against voltage transients and short-circuits in the motor cable. Furthermore it is equipped with protected digital inputs and outputs and adjustable current limitation to protect motor and load. The motor current and the actual speed of the motor shaft can be monitored by means of the analog output voltage.

No-compromise flexibility and efficiency

The wide range for input voltage and operating temperature allows a flexible use in almost all drive applications, in automation technology, in machine manufacturing and equipment engineering, and in robotics. With its exceptional efficiency of 98%, the inexpensive ESCON Module 50/5 is a first-class choice for mobile, highly efficient yet consumption-optimized applications.

For more information on ESCON, the new servo motor controller range of maxon motor, visit <http://escon.maxonmotor.com>.



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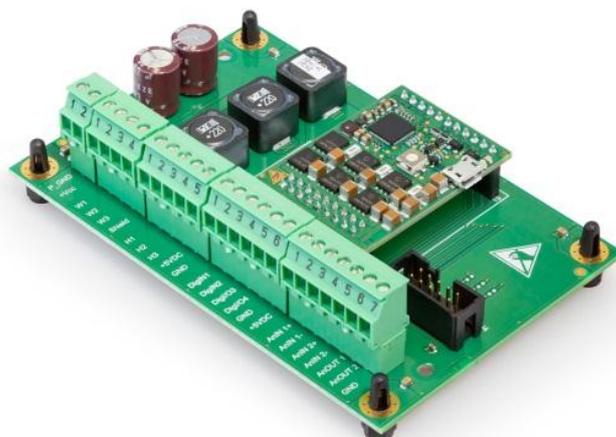
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*ESCON Module 50/5
Digital OEM servo motor controller for brushed
DC motors and brushless BLDC motors with Hall
sensors up to approx. 250 Watts
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*ESCON Module Motherboard with attached ESCON
Module 50/5
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