

ESCON Module 24/2 DC Servo Motor Controller

Mini from outside – maxi from within.

As an addition to the successful ESCON controller family, maxon motor presents another miniaturised +++OEM plug-in module. The high-performance 4-quadrant PWM servo motor controller, the size of a postage stamp, is designed to command permanent-magnet-activated brushed and brushless DC motors, with Hall sensors up to 48 Watt continuous output and 144 Watt peak output.

New additional functionality includes RC servo signal evaluation for speed or current set values, current limiter offset, and the option to predefine analog speed ramps.

The innovative OEM plug-in module features excellent controller characteristics. The drift-free behaviour enables speeds of up to 150'000 rpm. It provides extensive functionality with free configurable digital and analog inputs/outputs and can be operated in various modes, such as closed loop and open loop, and current controller. As a perfect match for maxon's motor range, the miniaturised ESCON Module 24/2 suits the highest-demanding applications. It easily integrates into complex applications with little effort. A detailed 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 an analog set value. It can be specified by means of analog voltage, by external or internal potentiometer, by defined value, by means of PWM signal, or with RC servo signal with variable duty cycle. Other interesting features are the ability to enable or disable the power stage depending on the direction of rotation, as well as acceleration and deceleration by employment of defined speed ramps. The speed can be controlled by means of digital incremental encoder (2 channel, with/without Line Driver), DC tachometer, or Hall sensors.

Startup in no time

The servo controller has been designed specifically with easy startup and user-friendliness in mind without requiring in-depth knowledge of drive technology.

When connected to a PC via a USB port, it can easily and efficiently be parameterised with the graphical user interface «ESCON Studio». A variety of functions and user-friendly wizards as well as a well-designed automated fine-tuning controller procedure assist during commissioning, for configuration of inputs and outputs, and diagnostics.

Protection at its best

The ESCON Module 24/2 features protective circuitry against overcurrent, excess temperature, undervoltage and overvoltage, voltage transients and short-circuits in the cable. It is also equipped with protected digital inputs and outputs and adjustable current limitation to protect motor and load. Motor current and actual motor shaft speed can be monitored by means of analog output voltage.

Pure flexibility and top efficiency

The wide range of both input voltage and operating temperature of +60°C (140°F) and a surplus derating allow flexible use in most solutions, such as small electronic appliances and equipment engineering or ro-

botics. With its exceptional efficiency of 92% and miniature dimensions, the ESCON Module 24/2 is a great choice for mobile, highly efficient yet consumption-optimised applications

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



Length of the press release: 4086 character, 607 words

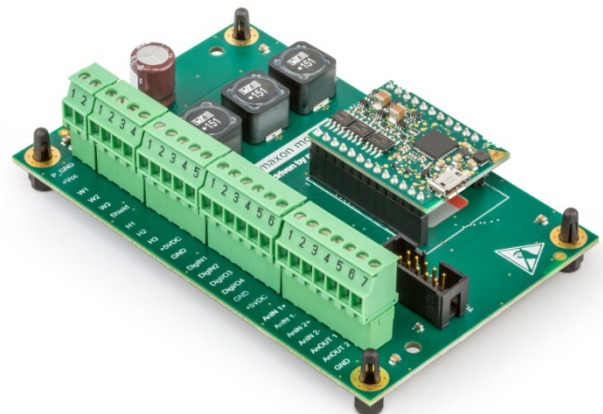
The media release is available as download on the Internet: www.maxonmotor.com

maxon motor ag
 Brünigstrasse 220
 P.O.Box 263
 CH-6072 Sachseln

Phone +41 41 666 15 00
 Fax +41 41 666 16 50
 Web www.maxonmotor.com



*ESCON Module 24/2
 35.6 x 26.7 x 12.7 mm (1.4 x 1.0 x 0.5 inches)
 Digital OEM servo motor controller for brushed DC
 motors and BLDC motors (brushless DC motors)
 with Hall sensors up to 144 Watt
 © 2014 maxon motor*



*ESCON Module 24/2 Motherboard with attached
 ESCON Module 24/2
 © 2014 maxon motor*