

### SMC3 RT-Ethernet Stepper Motor Controller

- Sercos® or EtherCAT® drive profile
- Positioning mode
- Operation with or without encoder
- Onboard I/Os
- 2-phase stepper motor interface

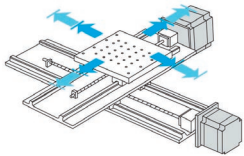
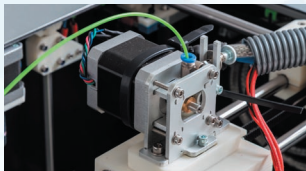
Stepper motors are ideal for cost-effective implementation of positioning functions. With the positioning mode of the **SMC3** stepper motor controller, such functions can now quickly and easily be integrated in **Sercos** or **EtherCAT** networks - without high programming effort.

In positioning mode the controller (PLC/CNC) just has to set a target position. This position is then approached with programmable velocity and acceleration values autonomously by the **SMC3**.

In addition to the positioning mode the **SMC3** supports cyclic velocity and position set values. All modes can be used with connected or without connected incremental encoder.

The onboard I/Os (4 digital outputs, 4 digital inputs and an encoder interface) allow the realization of a complete positioning axis with enable and status signals as well as inputs for limit and homing switches.

The stepper motor interface is designed for 2-phase motors with up to 256 microsteps at max. 6A current per phase and 48VDC supply.

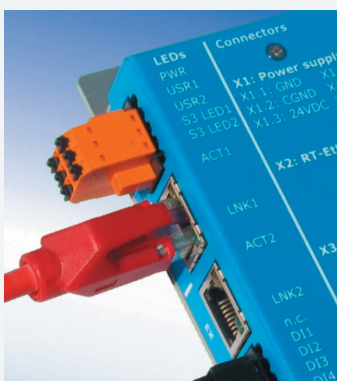
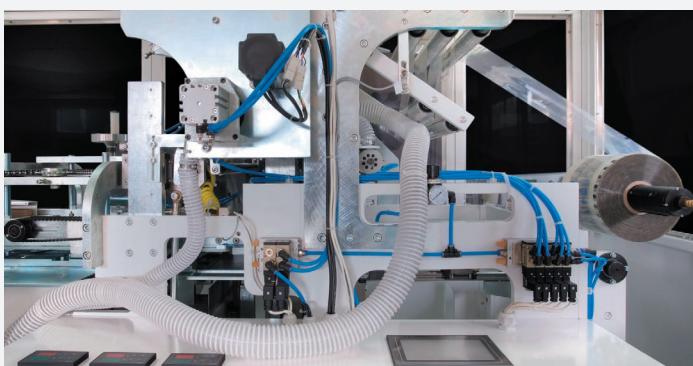


## SMC3

**SERCOS**  
the automation bus

**EtherCAT**

- Sercos
  - Drive profile (FSP-Drive)
  - I/O profile (FSP-IO) for onboard I/Os
  - FG-Probe for Touchprobe function
- EtherCAT
  - Drive profile (DS-402)



- Operation modes
  - Velocity mode
  - Position mode
  - Positioning mode
  - various homing modes
- Operation with or without encoder
- SMC3 has already all I/Os onboard to realize a complete positioning axis (1 x encoder interface, 4 x DI, 4 x DO)

Technical Information		SMC3
CPU		32bit CPU
Field busses		<b>Real-time Ethernet</b> <ul style="list-style-type: none"> <li>• Sercos (FSP-Drive, FG-Probe, FSP-IO for onboard-I/Os)</li> <li>• EtherCAT (DS-402)</li> </ul>
Stepper motor interface		<b>2-phase stepper motor</b> <ul style="list-style-type: none"> <li>• 6A current per phase</li> <li>• 48VDC supply</li> <li>• 256 microsteps</li> </ul>
Onboard I/Os		<ul style="list-style-type: none"> <li>• 4 x DigIN (24VDC)</li> <li>• 4 x DigOUT (24VDC/0.5A)</li> <li>• Incremental encoder interface with 5VDC or 24VDC encoder supply</li> </ul>
Dimension	H x D x W	180 mm x 117 mm x 29 mm
Power supply		24VDC
Cooling		passive
Enclosure		aluminium/steel
Mounting		wallmount
Operation temperature		0°C ÷ +55°C
Protection class		IP20
Certifications		CE, RoHS

## PRODUCTS

Technological components for industrial automation.



- ✓ PAC - PROGRAMMABLE AUTOMATION CONTROLLER
- ✓ I/O MODULES
- ✓ AUTOMATION SOFTWARE
- ✓ FIELDBUS & INDUSTRIAL ETHERNET
- ✓ HMI - HUMAN MACHINE INTERFACE
- ✓ DRIVES

## APPLICATIONS

Hardware and software solutions for specific user applications.



- ✓ REMOTE MONITORING & ASSISTANCE
- ✓ ENVIRONMENTAL MONITORING
- ✓ PREVENTIVE MAINTENANCE
- ✓ MACHINE CONTROL & PRODUCTION
- ✓ MOTION & ROBOTICS
- ✓ ENERGY EFFICIENCY

## ENGINEERING

Services for engineering projects.

35 years of experience in the automotive, energy, oil & gas and water treatment sectors enable Cannon Automata to present itself as complete and perfect partner for the development of industrial engineering and process projects. Systems are characterized by their high performance, thanks to an approach that is fully oriented to achieve tailored solutions to specific needs.

For the best results in terms of quality and customer satisfaction, Cannon-Automata follows an operative scheme that is widely experienced and successful, from the study to the implementation, and with a constant technical support.



**cannon**  
AUTOMATA

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