

Controller C1

General

Very small motion controller including PLC-functionality

(65 x 105 x 31 mm)

Suitable for DIN-rail mounting

Linux based Firmware

Structured programming with MotionBasic,

.NET, C , C++, Delphi, LabView

OLED-Display for status messages



Performance data

Processor:	Dual Core Cortex A7 application processor (1GHz) with integrated Cortex M4 (200MHz)
Memory:	8GB eMMC-Flash, 512MB DDR3L-SDRAM, 64kB EEPROM, RTC
Operating system:	Real-time implementation of Linux kernel version 4.14.78
Standard communication:	Gigabit Ethernet CAN/CAN FD interface for power amplifier (CANopen DS402) CAN interface for I/O-extensions (CANopen DS401)
I/O:	8 digital inputs and 4 digital outputs (500mA max.), all 24 V DC Dual enable input Dual ready output
Safety:	Logic and I/O galvanically isolated, separate 24V DC input for I/O
Supply voltage:	24VDC power supply electronically protected against over-current, over-voltage till 50 V and reverse polarity

Device data

Supply voltage logic:	24V DC nominal, 18V DC min. 30V DC max.
Stromaufnahme Logik:	280mA max. at 24V DC
Versorgungsspannung digitale I/O:	24V DC nominal
Stromaufnahme Digital I/O:	500mA max. per digital output
Abmessungen:	165 x 105 x 31 mm
Gewicht:	0,5 kg

Environmental conditions

Operating temperature:	0°C - 55°C
Storage temperature:	-25°C - 85°C
Humidity:	max. 95% non-condensing
EMC resistance:	In accordance with EN 61000-6-2 (Industrial area)
EMC noise generation:	In accordance with EN 61000-6-4 (Industrial area)
Vibration resistance:	EN60068-2-6
Shock resistance:	EN60068-2-27



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Controller CE1 (Extender-board)

Additional features and interfaces for C1

Gigabit Ethernet-interface for either Ethernet, Profinet or Ethercat

USB 2.0 Host

Serial interface switchable between RS232, RS422 and RS485

Interface for Encoder-input (incremental RS422)

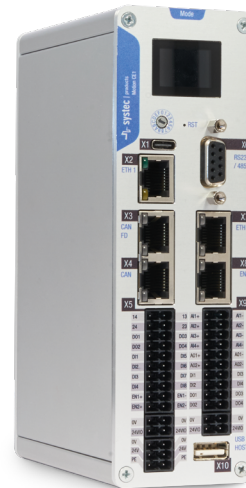
4 isolated digital inputs and 4 isolated digital outputs

(500mA max.), all 24 V DC

4 isolated analog inputs 0 - 10 V DC, 11 bit resolution

2 isolated analog outputs +/- 10 V DC (+/- 10mA max.),

11 bit resolution



Device data

Supply voltage logic:	24V DC nominal, 18V DC min. 30V DC max.
Total current consumption logic:	350mA max. at 24V DC
Supply voltage isolated I/O:	24V DC nominal
Current consumption I/O:	500mA max. per digital output
Dimensions:	165 x 105 x 51 mm
Weight:	0,8 kg

Environmental conditions

Operating temperature:	0°C - 55°C
Storage temperature:	-25°C - 85°C
Humidity:	max. 95% non-condensing
EMC resistance:	In accordance with EN 61000-6-2 (Industrial area)
EMC noise generation:	In accordance with EN 61000-6-4 (Industrial area)
Vibration resistance:	EN60068-2-6
Shock resistance:	EN60068-2-27

Applications

General motion applications, point to point or continuous path up to 8 axis

Control of H-portals, gantry, tripods (coordinate-transformation)

Laboratory robots

Handling systems

Quality control

Gluing und dosing applications

Marking applications

3D-Printer respectively additive manufacturing processes

CNC-laser and resistance welding

Technical data are subject to change without notice



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