

MiniMACS Data

Programmable Motion Controller



MiniMACS

The MiniMACS controllers are fully programmable Motion Controllers. They are suitable for less complex applications that still require compact dimensions.

Controller versions

CANopen Master/Slave, Standalone with APOSS® win

Features

Motion features	Trapezoidal, jerk limited, CAM, synchronous travel
Profile generator cycle	1 kHz (1 ms)
Sampling rate of PID positioning controller with speed and acceleration feed-forward control	1 kHz (1ms)
Maximum number of axes	3
Web server (visualization)	-
Expandable memory	-

Electrical data

Logic supply voltage V_c 18 - 30 VDC

Inputs

Digital inputs	16 (PLC level)
Analog inputs	6 (12-bit resolution, 0..10 V); alternative analog option IO1 or IO2 (see MACS5)
Hall sensor signals	-
CAN-ID (CAN node identification)	configurable with DIP switch

Output

Digital output	14 (max. 100 mA per output)
Analog output	option IO1
Configurable with DIP switch	+5 VDC, max. 200 mA

Interfaces

Profinet	-
CAN	1 high; low (max. 1 Mbit/s)
RS232 / RS485	-
EtherCAT-Master / EtherCAT-Slave	-
Ethernet	1
USB 2.0	1 Data+; Data- (Full Speed)

Encoder inputs

Digital incremental	1 (differential, max. 5 MHz)
Hiperface/Endat	-

Encoder outputs

Encoder TTL outputs	-
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Indicator

LEDs	37 (status, USB, IO)
Display	-

Environmental conditions

Temperature - Operation	0...+40°C
Temperature - Storage	-20...+85°C
Humidity (condensation not permitted)	20...80%

Mechanical data

Weight	500 / 300 g (DIN/compact housing)
Dimensions (L x W x H)	108 x 108 x 67 / 116 (98) x 98 x 42 mm
Mounting	DIN mounting / compact housing

Ordering Information: Please contact your maxon sales engineer

«There is no drive challenge that can't be solved»

Benefit from our expertise in control solutions for state-of-the-art drive technology in devices, machinery, and systems. With our products, complex challenges like highly dynamic multi-axis positioning or synchronization can be solved in a cost-effective and efficient manner. Our use of the licensefree APOSS® motion control programming language provides the versatility required to adapt our controllers perfectly to your needs.

In addition to standard products, we also offer the development of OEM custom solutions in the field of control technology and power electronics, as well as consulting and engineering services. Cost-optimized solutions and applicationspecific custom functions.