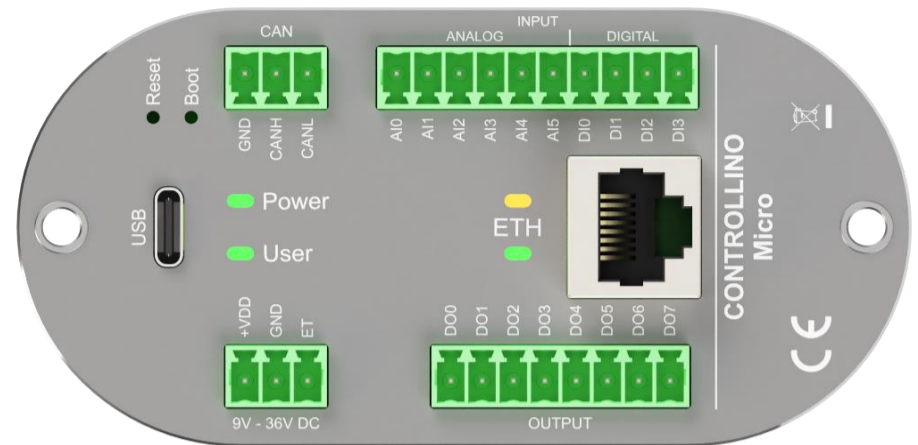


**Supply Voltage 12V / 24V**  
**6 analog inputs (24bit)**  
**4 analog/digital inputs (12bit)**  
**8 digital outputs (3A / channel)**

**USB-C (USB 1.1)**  
**Ethernet (W5500)**  
**CAN (MCP2515) or RS485 interface**


**GENERAL**

Dimensions (W × H × D)	mm	100 x 50 x 19,5
Weight in g	g	80
Mounting		screw holes (rail mount with adapter)
Housing		aluminium

**ENVIRONMENTAL CONDITIONS**

Operating ambient temperature	°C	-10° .. 55°
Relative humidity – non-condensing		80 % for temp. up to 31 °C, decreasing linearly to 50 % relative humidity at 55 °C
Pollution Degree		PD2
Altitude		up to 2000m AMSL
Vibration (5 ≤ f ≤ 9 Hz)		1,75 mm amplitude sinus 3,5 mm amplitude random
Vibration (9 ≤ f ≤ 150 Hz)		0,5 g acceleration sinus 1,0 g acceleration random
Transport and Storage		-20°C – +70°C 10 to 90% no condensation Altitude 3000m AMSL
Shock response		15g, 11ms half sinus all 3 axes

**ELECTRICAL CHARACTERISTICS**

Nominal Voltage	V DC	12-24
Absolute Maximum	V DC	36
Power consumptions	W	0,8 .. 1,0

**I/O**

USB (Power for programming only)		USB-C for RP2040 core
Ethernet		RJ45, 10/100Mbps
Analog inputs AI0 .. AI5	V	0 .. 28 @Amplifier Gain 2 (by default)
Resolution	bit	24
Sampling Rate	kHz	up to 1,15
Amplifier Gain		0.33, 1, 2 (default), 4, 8, 16, 32, 64 @64 measure range = 0 .. 0,85V @24bit
Analog/Digital inputs ADI0 .. ADI3		0 .. 25,8V
Analog Sampling Rate	kHz	up to 66
Resolution	bit	12
Digital Outputs, no galvanic insulation		8x Half-Bridge Driver up to 3A per channel 8x   PWM 16 Bit (8bit by default) Adjustable output current limit from 0.5A to 3A Built-in Current Sensor for output current monitoring

PIN Header, no galvanic insulation	
Logic level I/Os	2x GPIO 3,3V ready for UART, I2C, 1-wire, ...
Communication	USB-C, CAN or RS485, ETH
<b>COMPUTE CAPAPILITIES</b>	
Chip Type	RPI RP2040
On Chip SRAM	264KB
Flash Memory (external over QSPI)	16 Megabyte
Chip Frequency	133Mhz
Secure Element	ECC608 Cryptochip
<b>PROTECTION</b>	
ESD HBM Class 0	Contact discharge: ±4kV Air discharge: ±8kV
Supply input over current protection	-
Supply input reverse polarity protection	yes
Digital Output	Overload, short circuit, ESD
Signal Input	Overvoltage, ESD
Pin header connector	ESD
Current +3,3V	total 500mA, resettable fuse
<b>PHYSICAL DIMENSIONS</b>	

