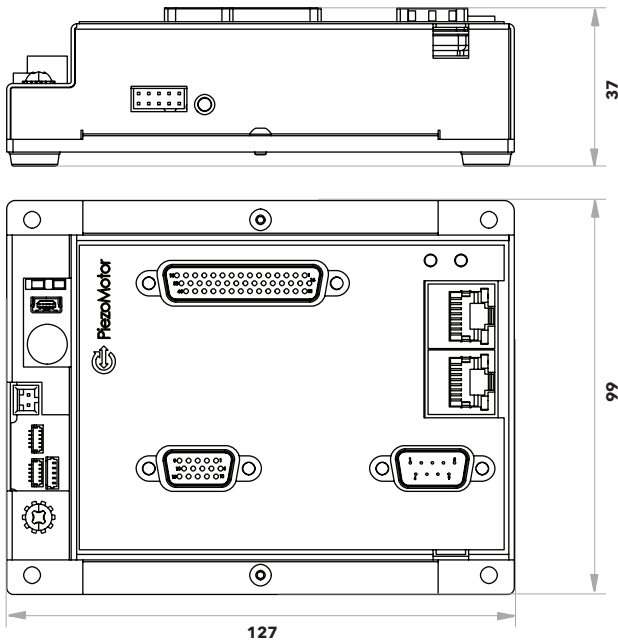


Technical specification DMC-30019

Type	Value	Note
Number of axes	1	
Multi-axis support	No	Daisy-chain Ethernet
True speed control	Yes	By encoder feedback
Resolution	8192 microsteps	Each full step of about 5 μ m is divided into 8192 steps
Maximum stepping rate (Full step frequency - Hz)	2500	Depends on motor
Supported encoders	Quadrature	ABZ differential, 15 MHz counting
	SSI	0-31 bits, 370-2000 kbps
	BiSS	0-38 bits, 370-2000 kbps
	Analog	Analog \pm 10 V (12 bits)
Host communication	Two Ethernet 10/100 ports	Daisy-chain Ethernet - no external hub required
	One RS232 port	Commands are sent in ASCII or binary format, up to 115 kbps
Servo interface	N/A	
General I/O	8 isolated inputs	
	4 isolated outputs	
	2 analog inputs	0-5 V, 12-bit ADC
	1 uncommitted analog output	\pm 10 V, 16-bit DAC
Stacking connector	N/A	
Motor connector	2 separate 5-pole JST and 1 Molex	
Encoder/servo connector	15-pole D-sub HD Female (Sensor)	3 connectors, parallel connections
	44-pole D-sub HD Female (I/O)	
Limit switch	Yes	Input for external limit switches
Communication connector	9-pole D-sub	RS232
	RJ45 (2x)	Ethernet
Power connector	2-pole header, 2.54 mm, Molex 70543-0001	Input for 48 V supply
Power supply	48 V DC, 20 W	48 V DC \pm 5%
Dimensions (mm)	99 x 127 x 37	

Main dimensions



Note: All specifications are subject to change without notice. For more information, see www.piezomotor.com.

Product description

The DMC-30019 is a single-axis motion controller with a motor amplifier for use with Piezo LEGS® motors from PiezoMotor. The unit is built on the DMC-30000 Pocket Motion Controller Series, which is the latest generation single-axis motion controllers from Galil Motion Control, Inc. The controller is assembled by PiezoMotor.

The motion controller operates stand-alone or can be networked to a PC via Ethernet. Like all Galil motion controllers, these controllers use a simple, English-like command language which makes them very easy to program. PiezoTools software further simplifies the system set-up with real-time display of position and velocity information.

Features

- Compact enclosure.
- Ethernet supports multiple masters and slaves. TCP/IP, UDP and Modbus TCP master protocol for communication with I/O devices.
- PID compensation with velocity and acceleration feed forward, integration limits, notch filter and low-pass filter, offset adjustments, and velocity smoothing to minimize jerks.
- Non-volatile memory for programs, variables and arrays. Concurrent execution of four programs.

Modes of motion

- Jogging
- Position tracking
- Point-to-point positioning
- Contouring
- PVT
- Electronic gearing
- Electronic cam
- Teach and playback

Uncommitted inputs / outputs

- 8 isolated inputs
- 4 isolated outputs
- 2 analog inputs; 0-5 V, 12-bit ADC
- 1 uncommitted analog output ± 10 V, 16-bit DAC

Dedicated inputs

- Main encoder inputs: channel A, A-, B, B-, I, I- (± 12 V or TTL)
- Forward and reverse limit inputs - isolated
- Home input - isolated