

# Modular Motion Controller | MMC-100

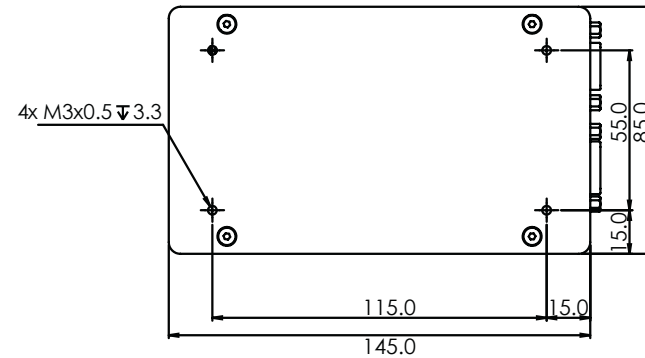
The MMC-100 is a high performance piezo motor controller. It allows speeds beyond 2 mm/s with our patent-pending multi-phase piezo motor at resolutions of 1 nm. Multiple units can be stacked as a compact multi-axis module and interface with a computer via a single USB or RS-485 cable. MICRONIX Motion Control Language allows for easy programming through simple ASCII commands.

## KEY FEATURES

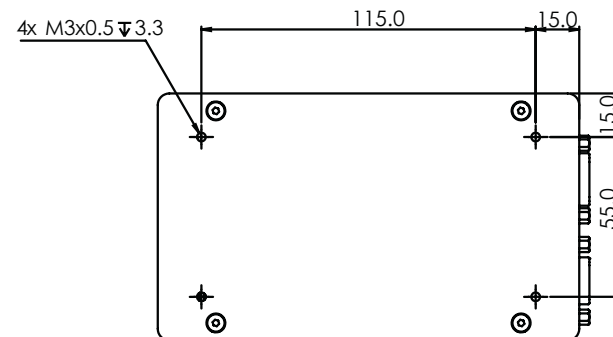
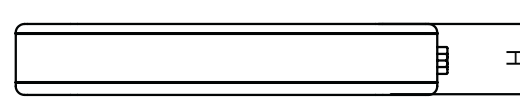
- Integrated controller for stick-slip, multi-phase piezo stages
- Compact, modular design allows for bench-top or 2U height rack mounting
- Open loop resolution down to 1 nm
- Closed loop resolution down to 1 nm (dependent on encoder)
- A quad B differential or sin/cos analog encoder feedback
- USB 2.0 or RS-485 interface (one interface for up to 99 axes)
- Windows GUI, and LabVIEW VI

## TECHNICAL DATA

Axes	1, stackable up to 16
Motor type	Piezo Motor, PM-002
Interface	USB 2.0, RS-485
Commands	ASCII commands
Power supply	Regulated 5 V DC (1 A per axis)
Speed, max	2 mm/s (stage dependent)
Resolution	1 nm (open loop), 1 nm (closed loop)
Trajectory mode	Trapezoidal velocity profile
Trajectory update frequency	1 kHz
Servo clock frequency	10 kHz
Program storage	16 storable programs
Enclosure dimensions	L145 x W85 x H25 mm
Software	Windows GUI, LabVIEW VI



Axes	H
1	24.4
2	41.2
3	58
4	74.8
5	91.6
6	108.4



## ORDERING INFORMATION

MMC-100- 0

AXES	1	2	3	4	5	6
1 Axis	1					
:	:					
6 Axes†	6					
POWER SUPPLY	0	1	2			
5 W	0					
25 W	1					
36 W	2					
ENCODER INTERFACE	0	1				
Analog (1 V <sub>pp</sub> )	0					
Digital (RS-422)	1					

† please contact support for larger stacks

Specifications are subject to change without notice.