

Motion Controller Card | MMX-320

NEW

Preliminary Available Q2, 2026
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The MMX-320 is a high-performance single-axis motion control card capable of driving BLDC, brushed DC, or voice coil actuators, providing a wide range of servo options for precise device control. It delivers sub-micron positioning resolution, enabling high-precision motion across diverse applications. Designed to interface with the MMX-RACK, multiple cards can be combined to create motion systems with up to 24 axes in a compact, high-density rack. The cards are easily field-replaceable, making repairs or system configuration updates simple and convenient. The MMX-RACK is sold separately; refer to its datasheet for additional details.

KEY FEATURES

- Supports BLDC, Brushed DC or voice coil motor control
- Closed loop resolution down to $< 1 \mu\text{m}$ (dependent on encoder)
- A quad B differential digital (RS-422), sin/cos analog, and absolute (BiSS-C) encoder interface
- Designed with MMX-RACK to create a high density controller
- Easily replace or expand number of axis on single system

TECHNICAL DATA

Axes	1, Expandable to 24 with MMX-RACK
Motor Type	BLDC Motor, DC Motor, Voice Coil
Interface	USB 2.0, Ethernet 10/100 Mbps (via MMX-RACK)
Commands	ASCII
Input Power	12-48V***
Motor Output	Max Voltage 48V, Max Current 5A ***
Resolution	$< 1 \mu\text{m}^{**}$
Trajectory Mode	Trapezoid Velocity Profile
Trajectory Update Frequency	1 kHz
Servo Clock Frequency	10 kHz
Program Storage	32 storable programs
Card Dimensions	L122.6 x W84 x H15 mm
Software	Windows GUI, LabView VI

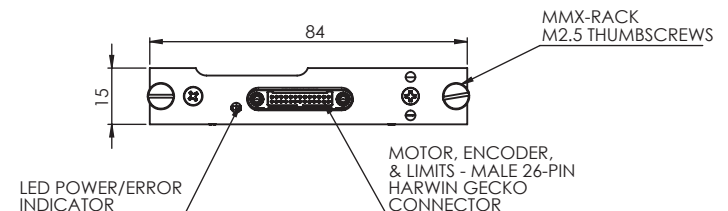
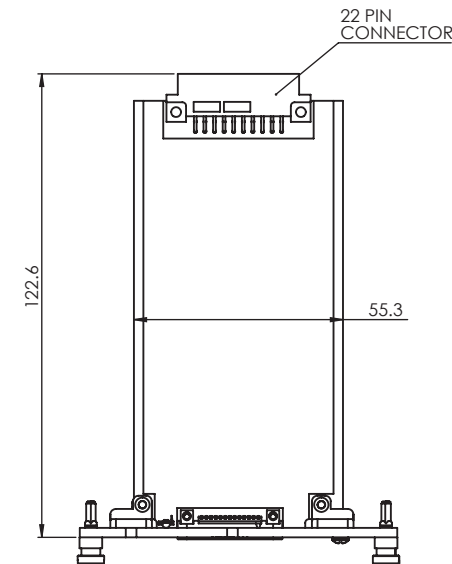
ORDERING INFORMATION

MMX-320 - 0 1 N 0

ENCODER INTERFACE

Analog (1 V _{pp}).....	0
Digital (RS-422)	1
Absolute (BiSS C)	2

** dependent on encoder
*** dependent on MMX-RACK



• all dimensions are in millimeters

Specifications are subject to change without notice.