

VersaMax MicroMotion

Compact, Scalable Motion Control for Micro Plus PLC Drives Productivity and Profitability

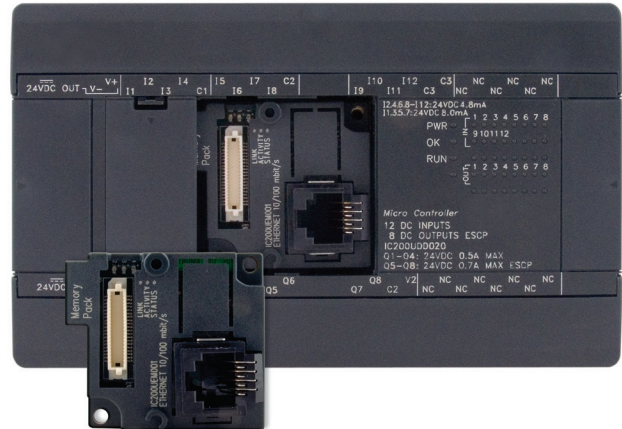
Today's manufacturing environment faces the critical need for shorter production runs, quicker changeovers, and just-in-time manufacturing. Machines are no longer dedicated to a single product and long production runs. Motion control capabilities play a critical role in addressing these challenges.

The VersaMax™ MicroMotion module is a scalable motion solution that offers precise, powerful control in a compact, efficient design with the flexibility to enhance machine performance, availability and profitability. The result is higher productivity, reduced downtime of critical assets and lower total cost of system ownership.

Application Flexibility and Scalability

MicroMotion provides the scalability and flexibility to cover a broad range of motion applications. For applications that require more I/O, two MicroMotion modules can be used to expand the Micro Plus series of controllers. For smaller machines, it can be used as a standalone motion controller with integrated motion I/O functions where motion is sequenced via the serial or Ethernet port.

Discrete moves can be controlled one at a time, or moves can be sequenced to create more complex machine profiles. With I/O expansion modules and multiple communications options, the VersaMax Micro Plus and MicroMotion provide the flexibility to configure your solution to your exact application performance requirements and budget.



Performance to Improve Productivity

Two channels of high-speed servo control, two independent 2Mhz pulse and direction outputs, and user configurable inputs and outputs make the MicroMotion module the perfect replacement for stepper applications in order to increase machine performance.

MicroMotion is designed to provide the power and performance of customized solutions with the convenience and economy of off-the-shelf technology.

You can reduce costs and save time on machine configurations without compromising the ability to customize the features that are right for your application.controller.

Feature	Benefit
Integrated motion and control in PAC Machine Edition	<ul style="list-style-type: none"> Seamless integration of motion, logic, and visualization functions along with common tag database reduces engineering and speeds time-to-market
Supports integrated or standalone configurations	<ul style="list-style-type: none"> Scale the system architecture and performance to match application requirements
High-speed registration control with window	<ul style="list-style-type: none"> Easily and accurately handle feed-to-mark or product detection requirements Active mark detection window eliminate false triggering
Electronic gearing	<ul style="list-style-type: none"> Provides accurate position and speed following between the two axes on each module
Portable memory device (removable Flash device)	<ul style="list-style-type: none"> Easy program storage or transfer of the motion profiles

Specifications

Number of Stored Moves

- 256

Move Types

- (1) Absolute + Increment method
- (2) Increment method

Position Rollover

- Linear, rotation

Positioning Command Unit

- Pulse, μm , inch, degree, Free-form

Speed Command Range

- 6.25k to 2M Pulse/second

Acceleration and Deceleration

- Linear Acc/Dec, S-shaped Acc/Dec

Dwell Time

- 0 to 65,535 ms (1 ms unit)

Acc/Dec Rate

- 1 to 50,000,000 (pulse/s², $\mu\text{m}/\text{s}^2$, inch/s², degree/s²)

Backlash Correction

- 0 to 65,535 (pulses, μm , inch, degree, Free-form)

Range

- Range +2,147,463,647 to -2,147,463,648 pulses

Pulse Output Type

- (1) Pulse column [CW/CCW]
- (2) Clock + direction signal [CK/direction]

Pulse Output Method

- Line Driver Output

Operating Mode

- Auto operation, manual operation, follower operation

Home Function

- Free homing
- Low-speed homing
- High-speed homing 1 (OFF edge)
- High-speed homing 2 (marker stop)

Manual (Jog) operation

- Manual input signal or pulse output by command

Feedrate Override Function

- 1 to 100% (Speed scale rate)

Typical Applications

Packaging

- Form, Fill and Seal
- Tray/Carton Former
- Bottle Filling
- Conveyor Control
- Lane Diverter
- Packaging Sorting

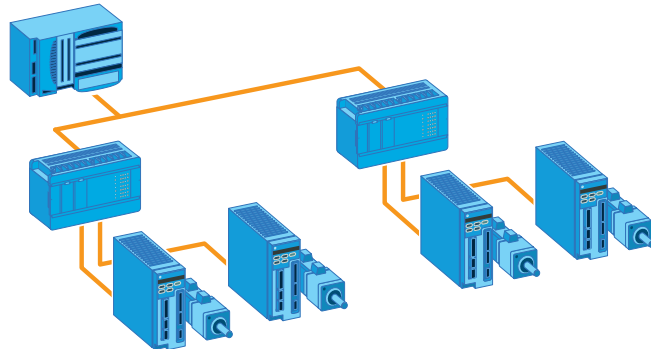
Material Handling

- Feed-to-Length
- Cut-to-Length
- Rotary Knife/Cutoff
- Edge guide adjustment
- Media Dispensing Jukeboxes

Assembly

- Pick-and-Place
- Dispensing Machine
- Coil Winding
- Quality Testing
- Battery Assembly

Architecture



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