

VersaMax™ Micro

Scalable Micro PLCs

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. VersaMax Micro helps you address this challenge as a scalable solution with precise and powerful control in a compact design. With the flexibility to enhance machine performance, availability, and profitability, the modular VersaMax Micro offers the features to match your application needs.

Application Flexibility and Scalability

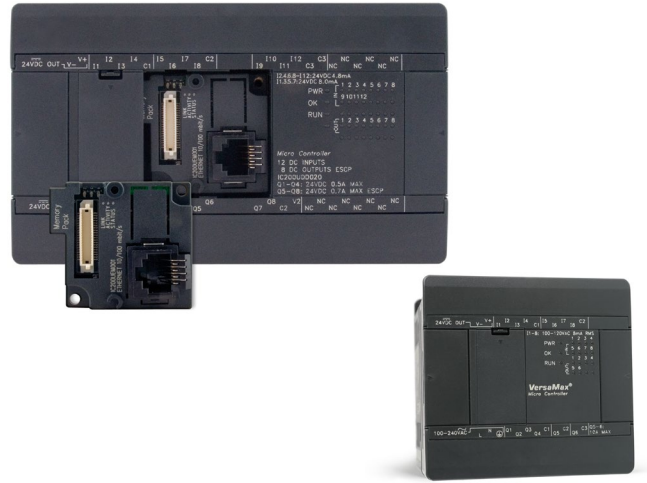
VersaMax Micro PLCs provide the scalability and flexibility to cover a broad range of applications. For applications that require more I/O, up to four modules can be used to expand the series of controllers. For smaller machines, units can be used as a standalone controller with integrated I/O functions. With I/O expansion modules and support of a portable program FLASH memory module, the VersaMax Micro PLCs provide the flexibility to configure a solution to your exact requirements and budget.

Big Features in a Compact Package

The small footprint VersaMax Micro PLC offers the flexibility of modular design and a variety of built-in features, including up to 64 I/O points (expandable to 176 I/O points), fast cycle times, a robust instruction set and extensive memory that multiplies your programming options.

A Variety of Communications Options

All units have a RS-232 port that can be used for SNP slave, Modbus RTU or serial I/O commands, and select units have an RS-485 port that adds SNP master and Modbus master commands. The Micro 20, Micro 40 and Micro 64 also have a second option port that supports either RS-232, RS-485 or USB communications module. The VersaMax Micro PLCs are easily networked to Ethernet with the powerful VersaMax SE (Serial to Ethernet module).



Performance to Improve Productivity

The VersaMax Micro family is designed to provide the power and performance of customized solutions with the convenience and economy of off-the-shelf technology. VersaMax Micro PLCs have two channels of high-speed control, two independent 65kHz pulse and direction outputs, and user configurable inputs and outputs to effectively increase machine performance. With VersaMax Micro PLCs you can reduce costs and save time on machine configurations without compromising the ability to customize the features that are right for your application.

Simplified Programming for PLCs

With PAC Machine Edition software, programming your VersaMax Micro PLCs is an intuitive process. Mix Relay Ladder Diagram and Instruction List programming within an application. Develop and save custom view tables. View PLC and I/O system fault tables on demand. PAC Machine Edition deploys HMI, motion, and multi-target control in an integrated development environment. This provides a common user interface, drag-and-drop editing, and a rich set of development tools. The Micro 20, Micro 40 and Micro 64 support a portable program FLASH Memory Module that provides a simple cost effective way of upgrading field controllers.

Feature	Benefit
Single Toolchain	<ul style="list-style-type: none"> Use PAC Machine Edition to program micro (VersaMax), compact (RSTi-EP), and large (RX3i) PLCs
Flexible Communications from Serial to Ethernet	<ul style="list-style-type: none"> Modbus Master, Modbus Slave and Report by exception Modem and Ethernet SRTP or Modbus TCP (Server) option
Abundance of Data Storage Capability	<ul style="list-style-type: none"> Up to 32K words of data storage
Powerful Instruction Set	<ul style="list-style-type: none"> Floating point math and PID for process control Write and Read data to internal FLASH

Specifications

	Micro 14	Micro 23	Micro 28	Micro 20	Micro 40	Micro 64
Built-in Discrete I/O	8 in/6 out	13 in/10 out	16 in/12 out	12 in/8 out	24 in/16 out	40 in/24 out
Built-in Analog I/O	None	2 in/1 out	None	None	None	None
I/O Expansion Units	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4
Logic Memory (Words)	9K	9K	9K	24K	24K	24K
Data Storage (Words)	256	2K	2K	32K	32K	32K
Scan Time (msec/K)	1.1 msec	1.1 msec	1.1 msec	1.1 msec	1.1 msec	1.1 msec
Battery Backed RAM	Super Cap only	Yes, and Super Cap	Yes, and Super Cap	Yes, and Super Cap	Yes, and Super Cap	Yes, and Super Cap
Real Time Clock	None	Included	Included	Included	Included	Included
Ports Available	1 RS-232	1 RS-232 and 1 RS-485	1 RS-232 and 1 RS-485	1 RS-232 and second port (RS-232, RS-485, USB, or Ethernet)	1 RS-232 and second port (RS-232, RS-485, USB, or Ethernet)	1 RS-232 and second port (RS-232, RS-485, USB, or Ethernet)
Ethernet Option	VersaMax SE	VersaMax SE	VersaMax SE	Second port	Second port	Second port
High Speed Counter	Up to 4 at 10Khz (16 bit)	Up to 4 at 10Khz (16 bit)	Up to 4 at 10Khz (16 bit)	Up to 4 at 100Khz (32 bit)	Up to 4 at 100Khz (32 bit)	Up to 4 at 100Khz (32 bit)
Pulse Train/PWM	Up to 4 at 5Khz (16 bit)	Up to 4 at 5Khz (16 bit)	Up to 4 at 5Khz (32 bit)	Up to 4 at 65Khz (32 bit)	Up to 4 at 65Khz (32 bit)	Up to 4 at 65Khz (32 bit)
Motion Commands	N/A	N/A	N/A	Find Home, Go Home, Jog, Ramp, Blended Move	Find Home, Go Home, Jog, Ramp, Blended Move	Find Home, Go Home, Jog, Ramp, Blended Move
Write Register Values to Internal Flash	Yes	Yes	Yes	Yes	Yes	Yes

IC200UDD110	28 point PLC, (16) 24VDC In, (12) 24VDC Out
IC200UDD120	28 point PLC, (16) 24VDC In, (12) 24VDC Out, with ESCP
Micro 20	
IC200UDD020	20 point PLC, (12) 24VDC In, (8) 24VDC Out
IC200UDD220	20 point PLC, (12) 24VDC In, (8) 24VDC Sink Out
IC200UDR120	20 point PLC, (12) 24VDC In, (8) Relay Out, 120/240VAC Power Supply
IC200UDR020	20 point PLC, (12) 24VDC In, (8) Relay Out, 24VDC Power Supply
Micro 40	
IC200UDD040	40 point PLC, (24) 24VDC In, (16) 24VDC Out
IC200UDD240	40 point PLC, (24) 24VDC In, (16) 24VDC Sink Out
IC200UDR140	40 point PLC, (24) 24VDC In, (16) Relay Out
IC200UDR440	40 point PLC, (24) 24VDC In, (16) Relay Out, 12/24VDC
IC200UDR040	40 point PLC, (24) 24VDC In, (16) Relay Out, 24VDC
Micro 64	
IC200UEX364	64 point Expansion (40) 24VDC In, 24VDC sink Out
IC200UEX264	64 point Expansion (40) 24VDC In, 24VDC source outp
IC200UEX064	64 point Expansion (40) 24VDC In, relay Out, 24
IC200UEX164	64 point Expansion (40) 24VDC In, relay Out, AC
IC200UDD164	64 point PLC, (40) 24VDC In, (24) 24VDC Sink Out
IC200UDD064	64 point PLC, (40) 24VDC In, (24) 24VDC source Out
IC200UDR164	64 point PLC, (40) 24VDC In, (24) Relay Out
IC200UDR064	64 point PLC, (40) 24VDC In, (24) Relay Out, 24VDC
Expansion	
IC200UEX624	Expansion, 4 channel Analog In
IC200UEX826	Expansion, 4 channel Thermocouple/mV In module
IC200UEX824	Expansion, 4 channel Thermocouple/mV In module, 24VDC
IC200UEX636	Expansion, 6 channel Analog (4) In, (2) Out
IC200UEX616	Expansion, 6 channel Analog (4) In, (2) Out, 12VDC
IC200UEX626	Expansion, 6 channel Analog (4) In, (2) Out, 24VDC
IC200UEO116	Expansion, 16 Out (16) 24VDC Sink Out, 24VDC
IC200UER016	Expansion, 16 Out (16) Relay Out, 24VDC Power
IC200UEO016	Expansion, 16 point (16) 24VDC Source ESCP Out
IC200UEI016	Expansion, 16 point In (16) 24VDC In
IC200UEO008	Expansion, 8 Out (8) 24VDC Out
IC200UER008	Expansion, 8 Out (8) Relay Out, 24VDC Power S
IC200UEO108	Expansion, 8 Out 24VDC Sink Out, 24VDC Power S