VersaMax® I/O and Control

With its innovative modular architecture, VersaMax combines power and versatility to help provide performance in a compact and affordable control solution.

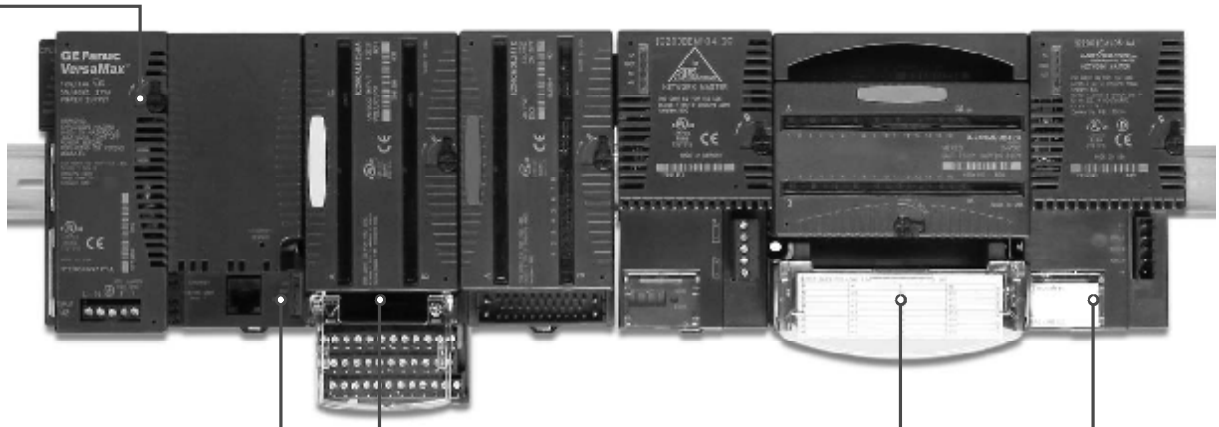
The VersaMax product family can be used as I/O, as a PLC, and as distributed control for up to 4096 I/O points. With its modular architecture, intuitive features, and unparalleled ease of use, it helps save machine builders and end users time and money.

VersaMax is the first GE Fanuc control product created using the unique Six Sigma design process. Six Sigma combines global research and development techniques, extensive customer needs analysis, and rigorous quality control standards.

The VersaMax I/O and Control product family features a broad selection of I/O modules, terminations, power supplies, and network interface options to enhance your control capability.

Proficy™ Machine Edition

Proficy Machine Edition is an advanced software environment for the development and maintenance of machine level automation. Visualization, motion control, and execution logic are developed with a single programmer.



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Publication Reference Chart

GFK-1179	Installation Requirements for Conformance to Standards
GFK-1503	VersaMax PLC User's Manual
GFK-1504	VersaMax Modules, Power Supplies, and Carriers User's Manual
GFK-1533	VersaMax System DeviceNet Communications Modules User's Manual
GFK-1534	VersaMax System Profibus Network Modules User's Manual
GFK-1535	VersaMax System Genius Network Interface Unit User's Manual
GFK-1563	VersaMax I/O and Industrial Networking Application Guide
GFK-1697	VersaMax System AS-i Network Master Module User's Manual
GFK-1847	Remote I/O Manager User's Manual
GFK-1852	VersaMax Serial to Ethernet Adapter User's Manual
GFK-1860	VersaMax System Ethernet Network Interface Unit User's Manual
GFK-1868	Proficy Machine Edition Getting Started Guide
GFK-1876	VersaMax Ethernet Station Manager Manual
IC690CDU002	InfoLink for PLC CD-ROM

CPUs

VersaMax CPUs supply a number of features usually found only in PLCs with larger footprints, including up to 64K of memory for application programs, floating point math, and real-time clock. With a modular and scalable architecture, the VersaMax CPU is ideal for standalone control applications with up to 256 local I/O or expanded systems of up to 4,096 I/O points.

	IC200CPU001	IC200CPU002	IC200CPU005	IC200CPUE05
Product Name	**VersaMax PLC CPU 32K Configurable Memory, 2 Ports RS-232 and RS-485**	**VersaMax PLC CPU 42K Configurable Memory, 2 Ports RS-232 and RS-485**	**VersaMax PLC CPU 128K Configurable User Memory, 2 Ports RS-232 and RS-485**	**VersaMax PLC CPU 128K Configurable User Memory, 2 Ports RS-232 and RS-485, 10 MBIT Ethernet Port**
I/O Discrete Points	2048 in, 2048 out	2048 in, 2048 out	2048 in, 2048 out	2048 in, 2048 out
I/O Analog Words	Configurable	Configurable	Configurable	Configurable
Registers	Configurable	Configurable	Configurable	Configurable
Discrete Internal Bits	1024 points	1024 points	1024 points	1024 points
Discrete Temporary Bits	256 points	256 points	256 points	256 points
Global Discrete Bits	1280 points	1280 points	1280 points	1280 points
Program Memory	Configurable	Configurable	Configurable	Configurable
Boolean Execution Speed	1.8 ms/K (typical)	1.8 ms/K (typical)	0.8 ms/K (typical)	0.8 ms/K (typical)
Floating Points	Yes	Yes	Yes	Yes
Override	Yes	Yes	Yes	Yes
Built-in Communications	SNP Slave, RTU Master and Slave, Serial I/O	SNP Slave, RTU Master and Slave, Serial I/O	SNP Slave, RTU Master and Slave, Serial I/O	10 MBIT Ethernet Port, SNP Slave, RTU Master and Slave, Serial I/O
Type of Memory Storage	System flash, battery-backed RAM	System flash, battery-backed RAM	System flash, battery-backed RAM	System flash, battery-backed RAM
Battery-Backed Real-Time Clock	Yes	Yes	Yes	Yes
Power Consumption	140 mA maximum on 5 V output, 100 mA on +3.3 V output	141 mA maximum on 5 V output, 100 mA on +3.3 V output	180 mA maximum on 5 V output, 290 mA on +3.3 V output	260 mA maximum on 5 V output, 650 mA on +3.3 V output
5V Backplane Current Consumption (mA)	40/140	40/140	80/180	160/260
3.3V Backplane Current Consumption (mA)	100	290	650	650

Carriers

VersaMax provides several types of snap-together I/O carriers and interposing terminals to provide maximum wiring flexibility, as well as module hot insertion and removal. VersaMax carriers support IEC box-style, spring-style, and barrier-style terminals and are also available as snap-on auxiliary terminal strips and interposing terminals that can be mounted separately and connected to a connector-style carrier by an I/O cable.

	IC200CHS001	IC200CHS002	IC200CHS003	IC200CHS005	IC200CHS006	IC200CHS011
Product Name	**VersaMax I/O Carrier, Local Barrier Style**	**VersaMax I/O Carrier, Local Box Style**	**VersaMax I/O Carrier, Connector Style**	**VersaMax I/O Carrier, Local Spring Clamp Connection Style**	**VersaMax I/O, Local Communications Carrier**	**VersaMax I/O Carrier, Interposing Barrier Style**
Field Termination Type	Integrated	Integrated	Integrated	Integrated	Communications	Non-Integrated
Connection Style	Barrier	Box	Connector	Spring	N/A	Barrier

	IC200CHS012	IC200CHS014	IC200CHS015	IC200CHS022	IC200CHS025	IC200PWB001
Product Name	**VersaMax I/O Carrier, Interposing Box Style**	**VersaMax I/O Carrier, Interposing Box Thermocouple Compensation**	**VersaMax I/O, Carrier Interposing Spring Clamp**	**VersaMax Compact I/O Carrier, Local Box Clamp Connection Style**	**VersaMax Compact I/O Carrier, Local Spring Clamp Connection Style**	**VersaMax Power Supply Booster Carrier**
Field Termination Type	Non-Integrated	Integrated	Non-Integrated	Integrated	Integrated	Power Supply
Connection Style	Box	Box-Thermocouple Compensation	Spring	Local Box	Local Sprint	N/A

Power Supplies

VersaMax Power Supply modules snap onto any VersaMax CPU or Network Interface Unit, or onto a power supply booster carrier. Each power supply can be used as the main power source for modules in the I/O Station, or as a source of supplemental power for larger I/O applications.

	IC200PWR001	IC200PWR002	IC200PWR101	IC200PWR102	IC200PWR201	IC200PWR202
Product Name	**24VDC Power Supply**	**24VDC Power Supply with Expanded 3.3 V**	**120/240VAC Power Supply**	**120/240VAC Power Supply with Expanded 3.3 VDC**	**12 VDC Power Supply**	**12 VDC Power Supply with Expanded 3.3 VDC**
Input Voltage	24 VDC	24 VDC	120/240 VAC	120/240 VAC	9.6-15 VDC, 12 VDC nominal	9.6-15 VDC, 12 VDC nominal
Output Voltage	5 VDC, 3.3 VDC	5 VDC, 3.3 VDC	5 VDC, 3.3 VDC	5 VDC, 3.3 VDC	5 VDC, 3.3 VDC	5 VDC, 3.3 VDC
Extended Power	No	Yes	No	Yes	No	Yes
Input Power	11 W	11 W	27 VA	27 VA	11 W	11 W
Holdup Time	10 ms	10 ms	20 ms	20 ms	10 ms	10 ms
Inrush Current	20 A @ 24 VDC; 25 A @ 30 VDC	20 A @ 24 VDC; 25 A @ 30 VDC			25 A at 12 VDC; 30 A at 15 VDC	25 A at 12 VDC; 30 A at 15 VDC
Protection	Short circuit, overload, reverse polarity	Short circuit, overload, reverse polarity	Short circuit, overload	Short circuit, overload	Short circuit, overload, reverse polarity	Short circuit, overload, reverse polarity
Total Output Current	1.5 A maximum	1.5 A maximum	1.5 A maximum	1.5 A maximum	1.5 A maximum	1.5 A maximum
3.3V Output Current	0.25 A maximum	1.0 A maximum	0.25 A maximum	1.0 A maximum	0.25 A maximum	1.0 A maximum
5V Output Current	1.5 A-I(3.3V) maximum	1.5 A-I(3.3V) maximum	1.5 A-I(3.3V) maximum	1.5 A-I(3.3V) maximum	1.5 A-I(3.3V) maximum	1.5 A-I(3.3V) maximum

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDD840	IC200MDD841	IC200MDD842
Product Name	**VersaMax Discrete Mixed Modules, 24VDC Pos Logic Input 20 points/Output Relay 2.0 A, 12 points**	**VersaMax Discrete Mixed Modules 24VDC Pos Logic Input 20/Output 12/HSC, PWM or Pulse Train**	**VersaMax Discrete Mixed Modules 24VDC Pos Logic Input 16/Output 24 VDC 0.5 A with ESCP**
Input Voltage	24 VDC	24 VDC	24 VDC
Output Voltage	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	24 VDC	24 VDC
Number of Points	20 in/12 out	20 in/12 out/4 configurable	16 in/16 out
Channel to Channel Isolation	No	No	No
Load Current per Point	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC	N/A	0.5 A for 30 VDC
Input and Output Response Time-On/Off(ms)	0.5 and 10	7 and 0.5	0.5 and 0.5
Protection	No internal fuses or snubbers	No internal fuses	Short circuit protection, overcurrent protection, free-wheeling diodes
Points per Common			
On State Current	2-50.5 mA	3.0-8.0 mA	
Off State Current	0-0.5 mA	0-0.5 mA	0-0.5 mA
External Power Supply	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	24 VDC nominal, 18-30 VDC	18-30 VDC, 24 VDC nominal
Input Impedance	10 kOhms maximum	9.6 kOhms maximum	10 kOhms maximum
Load Current	2.0 A for 5-265 VAC or 5-30 VDC, 0.2 A for 31-125 VDC	0.5 A maximum	
5V Backplane Current Consumption (mA)	375 maximum	30	100 maximum
LED Indicators	One LED per point shows individual point on/off state; OK LED indicates backplane power is present	One LED per point shows individual point on/off state; FLD PWR indicates field power is present; OK LED indicates backplane power is present	One green LED per point shows individual point on/off state. One amber LED per point shows individual point overloads for outputs. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDD843	IC200MDD844	IC200MDD845
Product Name	**VersaMax Discrete Mixed Modules 24VDC Positive Logic Input 10/Output Relay 6**	**VersaMax Discrete Mixed Modules 24VDC Positive Logic Input 16/Output 24 VDC 0.5 A 16**	**VersaMax Discrete Mixed Modules 24VDC Positive Logic Input 16/Output Relay 2.0A Isolated 8 points**
Input Voltage	24 VDC	24 VDC	24 VDC
Output Voltage	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	24 VDC	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Number of Points	10 in/6 out	16 in/16 out	16 in/8 out
Channel to Channel Isolation	No	No	Yes, outputs
Load Current per Point	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC	0.5 A for 30 VDC	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC
Input and Output Response Time-On/Off(ms)	0.5 and 10	0.5 and 0.2/1	0.5 and 10
Protection	No internal fuses or snubbers	No internal fuses	No internal fuses or snubbers
Points per Common			
On State Current			
Off State Current	0-0.5 mA	0-0.5 mA	0-0.5 mA
External Power Supply	0-125 VDC, 5/24/125 VDC nominal, 0-265 VAC (47-63 Hz), 120/240 VAC nominal	18-30 VDC, 24 VDC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Input Impedance	10 kOhms maximum	10 kOhms maximum	10 kOhms maximum
Load Current			
5V Backplane Current Consumption (mA)	190 maximum	70 maximum	270 maximum
LED Indicators	One LED per point shows individual point on/off state. OK LED indicates backplane power is present	One LED per point shows individual point on/off state; FLD PWR LED indicates field power is present; OK LED indicates backplane power is present	One green LED per point shows individual point on/off state. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDD846	IC200MDD847	IC200MDD848
Product Name	**VersaMax Discrete Mixed Modules 120VAC Input 8 points/Outpoints Relay 2.0A Isolated 8 points**	**VersaMax Discrete Mixed Modules 240VAC Input 8 points/Output Relay 2.0A Isolated 8 points**	**VersaMax Discrete Mixed Modules 120VAC Input 8 points/Output 120VAC 0.5A Isolated 8 points**
Input Voltage	120 VAC	240 VAC	120 VAC
Output Voltage	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	120 VAC
Number of Points	8 in/8 out	8 in/8 out	8 in/8 out
Channel to Channel Isolation	Yes, outputs	Yes, outputs	Yes
Load Current per Point	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC	10 mA min, 0.5 A max, 5 A for 1 cycle (20 ms) max inrush
Input and Output Response Time-On/Off(ms)	1 cycle/2 cycle and 10	1 cycle/2 cycle and 10	1 cycle/2 cycle and <1/2 cycle/<1/2 cycle
Protection	No internal fuses or snubbers	No internal fuses or snubbers	Snubber and MOVs (each output)
Points per Common			
On State Current	5 mA minimum	4 mA minimum	5 mA minimum
Off State Current	2.5 mA maximum	1.5 mA maximum	2.5 mA maximum
External Power Supply	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Input Impedance	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical	38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical
Load Current			10 mA minimum per point, 0.5 A maximum per point, 5.0 A for one cycle (20 ms) maximum inrush
5V Backplane Current Consumption (mA)	300 maximum	300 maximum	125 maximum
LED Indicators	One LED per point shows individual point on/off state. OK LED indicates backplane power is present.	One LED per point shows individual point on/off state; OK LED indicates backplane power is present	One LED per point shows individual point on/off state. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDD849	IC200MDD850	IC200MDD851
Product Name	**VersaMax Discrete Mixed Modules 120 VAC Input Isolated 8 points/Output Relay 2.0 A Isolated 8 points**	**VersaMax Discrete Mixed Modules 240 VAC Input Isolated 4 points/Output Relay 2.0 A Isolated 8 points**	**VersaMax Discrete Mixed Modules 5/12VDC Input 16 points/Output12/24VDC 16 points**
Input Voltage	0-132 VAC (47 to 63 Hz), 120 VAC nominal	0-264 VAC (47-63 Hz), 240 VAC nominal	0 to 15VDC, +5/12VDC Nominal
Output Voltage	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	+10.2 to +30VDC, +12/24VDC nominal
Number of Points	8 in/8 out	8 out/4 in	16 out/16 in
Channel to Channel Isolation	Yes	Yes	No
Load Current per Point	2.0 A	2.0 A	0.5 Amps at 30VDC maximum (resistive) 2.0amps maximum for 100ms inrush
Input and Output Response Time-On/Off(ms)	1 cycle/2 cycle and 10/10	1 cycle/2 cycle and 10/10	0.25ms maximum/0.2ms ON and 1.0ms OFF maximum
Protection	No internal fuses or snubbers	No internal fuses or snubbers	No internal fuses or snubbers
Points per Common			
On State Current	5 mA minimum	4 mA minimum	1.45mA minimum
Off State Current	2.5 mA maximum	1.5 mA maximum	0 to 0.7 mA maximum
External Power Supply			+10.2 to +30VDC, +12/24VDC nominal
Input Impedance	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical	38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical	2.4kOhms typical @ 12VDC
Load Current	10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive)	10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive)	0.5 Amps at 30VDC maximum (resistive); 2.0 Amps maximum for 100ms inrush
5V Backplane Current Consumption (mA)	300 maximum	260 maximum	115 maximum
LED Indicators	One LED per point shows individual point on/off state. OK LED indicates backplane power is present	One LED per point shows individual point on/off state. OK LED indicates backplane power is present	One LED per point shows individual point on/off state. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL140	IC200MDL141	IC200MDL143
Product Name	**VersaMax Discrete Input Module 120 VAC, 8 points**	**VersaMax Discrete Input Module 240 VAC, 8 points**	**VersaMax Discrete Input Module 120 VAC Isolated, 8 points**
Input Voltage	0-132 VAC	0-264 VAC	0-132 VAC
Output Voltage	N/A	N/A	N/A
Number of Points	8	8	8
Channel to Channel Isolation	No	No	Yes
Load Current per Point	N/A	N/A	N/A
Input and Output Response Time-On/Off(ms)	1 cycle/2 cycles	1 cycle/2 cycles	1 cycle/2 cycles
Protection			
Points per Common			
On State Current	5 mA minimum	7 mA minimum	5 mA minimum
Off State Current	2.5 mA maximum	1.5 mA maximum	2.5 mA maximum
External Power Supply	None	None	None
Input Impedance	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical	38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical
Load Current			
5V Backplane Current Consumption (mA)	55 maximum	55 maximum	50 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL144	IC200MDL240	IC200MDL241
Product Name	**VersaMax Discrete Input Module 240 VAC Isolated, 4 points**	**VersaMax Discrete Input Module, 120VAC Positive Logic, 16 points**	**VersaMax Discrete Input Module, 240VAC Positive Logic, 16 points**
Input Voltage	0-264 VAC	0-132 VAC	0-264 VAC
Output Voltage	N/A	N/A	N/A
Number of Points	4	16	16
Channel to Channel Isolation	Yes	No	No
Load Current per Point	N/A	N/A	N/A
Input and Output Response Time-On/Off(ms)	1 cycle/2 cycles	1 cycle/2 cycles	1 cycle/2 cycles
Protection			
Points per Common		2 Groups of 8	2 Groups of 8
On State Current	7 mA minimum	5 mA minimum	4 mA minimum
Off State Current	3 mA maximum	2.5 mA maximum	1.5 mA maximum
External Power Supply	None	None	None
Input Impedance	38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical	38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical
Load Current			
5V Backplane Current Consumption (mA)	30 maximum	110 maximum	110 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL243	IC200MDL244	IC200MDL329
Product Name	**VersaMax Discrete Input Module, 120 VAC Isolated, 16 points**	**VersaMax Discrete Input Module, 240 VAC Isolated, 8 points**	**VersaMax Discrete Output Module, 120 VAC, 0.5A per point Isolated, 8 points**
Input Voltage	0-132 VAC	0-264 VAC	N/A
Output Voltage	N/A	N/A	85-132 VAC (47-63 Hz), 120 VAC nominal
Number of Points	16	8	8
Channel to Channel Isolation	Yes	Yes	Yes
Load Current per Point	N/A	N/A	0.5 A per point
Input and Output Response Time-On/Off(ms)	1 cycle/2 cycles	1 cycle/2 cycles	<1/2 cycle/<1/2 cycle
Protection			Snubber and MOVs (each output)
Points per Common			
On State Current	5 mA minimum	7 mA minimum	
Off State Current	2.5 mA maximum	3 mA maximum	
External Power Supply	None	None	85-132 VAC (47-63 Hz), 120 VAC nominal
Input Impedance	8.6 kOhms (reactive) at 60 Hz, typical; 10.32 kOhms (reactive) at 50 Hz, typical	38.5 kOhms (reactive) at 60 Hz, typical; 46.3 kOhms (reactive) at 50 Hz, typical	
Load Current			10 mA minimum per point, 0.5 A maximum per point, 5.0 A for one cycle (20 ms) maximum inrush
5V Backplane Current Consumption (mA)	100 maximum	60 maximum	70 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL330	IC200MDL331	IC200MDL631
Product Name	**VersaMax Discrete Output Module, 120 VAC 0.5A per point Isolated, 16 points**	**VersaMax Discrete Output Module, 120 VAC 2.0A per point Isolated, 8 points**	**VersaMax Discrete Input Module 125 VDC, Pos/Neg Logic, Isolated, 8 points**
Input Voltage	N/A	N/A	0 to 150 VDC, 125 VDC nominal
Output Voltage	85-132 VAC (47-63 Hz), 120 VAC nominal	85-132 VAC (47-63 Hz), 120 VAC nominal	N/A
Number of Points	16	8	8 isolated inputs
Channel to Channel Isolation	Yes	Yes	Yes
Load Current per Point	0.5 A per point	2.0 A per point	N/A
Input and Output Response Time-On/Off(ms)	<1/2 cycle/<1/2 cycle	<1/2 cycle/<1/2 cycle	0.5 maximum
Protection	Snubber and MOVs (each output)	Snubber and MOVs (each output)	
Points per Common	Isolated points	Isolated points	
On State Current			1.0 mA minimum
Off State Current			0 to 0.1 mA maximum
External Power Supply	85-132 VAC (47-63 Hz), 120 VAC nominal	85-132 VAC (47-63 Hz), 120 VAC nominal	None
Input Impedance			74 K Ohm typical at 125 VDC
Load Current	10 mA minimum per point, 0.5 A maximum per point, 5.0 A for one cycle (20 ms) maximum inrush	10 mA minimum per point, 2.0 A maximum per point, 20 A for one cycle (20 ms) maximum inrush	
5V Backplane Current Consumption (mA)	140 maximum	85 maximum	40 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL632	IC200MDL635	IC200MDL636
Product Name	**VersaMax Discrete Input Module 125 VDC, Pos/Neg Logic, Isolated, 16 points**	**VersaMax Discrete Input Module 48 VDC, Pos/Neg Logic (2 Groups of 8), 16 points**	**VersaMax Discrete Input Module 48 VDC, Pos/Neg Logic (4 Groups of 8), 32 points**
Input Voltage	0 to 150 VDC, 125 VDC nominal	0-60 VDC, 48 VDC nominal	0-60 VDC, 48 VDC nominal
Output Voltage	N/A	N/A	N/A
Number of Points	16 isolated inputs	16 inputs (2 groups of 8)	32 (4 groups of 8)
Channel to Channel Isolation	Yes	No	No
Load Current per Point	N/A	N/A	N/A
Input and Output Response Time-On/Off(ms)	0.5 maximum	0.5 maximum	0.5 maximum
Protection			
Points per Common			
On State Current	1.0 mA minimum	1.0 mA minimum	1.0 mA minimum
Off State Current	0 to 0.1 mA maximum	0 to 0.4 mA maximum	0 to 0.4 mA maximum
External Power Supply	None	None	None
Input Impedance	74 K Ohm typical at 125 VDC	28 K Ohm typical	28 K Ohm typical
Load Current			
5V Backplane Current Consumption (mA)	80 maximum	70 maximum	140 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL640	IC200MDL643	IC200MDL644
Product Name	**VersaMax Discrete Input Module, 24 VDC Positive Logic, 16 points**	**VersaMax Discrete Input Module, 5/12 VDC (TTL) Pos/Neg Logic, 16 points**	**VersaMax Discrete Input Module, 5/12 VDC (TTL) Pos/Neg Logic, 32 points**
Input Voltage	0-30 VDC	0-15 VDC	0-15 VDC
Output Voltage	N/A	N/A	N/A
Number of Points	16	16	32
Channel to Channel Isolation	No	No	No
Load Current per Point	N/A	N/A	N/A
Input and Output Response Time-On/Off(ms)	0.5	0.25	0.25
Protection			
Points per Common	2 Groups of 8		
On State Current	2.0-5.5 mA	1.45 mA minimum	1.45 mA minimum
Off State Current	0-0.5 mA	0-0.7 mA maximum	0-0.7 mA maximum
External Power Supply	None	None	None
Input Impedance	10 kOhms maximum	2.4 kOhms at 12 VDC, typical	2.4 kOhms at 12 VDC, typical
Load Current			
5V Backplane Current Consumption (mA)	25 maximum	70 maximum	140 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL650	IC200MDL730	IC200MDL740
Product Name	**VersaMax Discrete Input Module, 24VDC Positive Logic, 32 points**	**VersaMax Discrete Output Module, 24 VDC Positive Logic 2.0A per point w/ESCP, 8 points**	**VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point, 16 points**
Input Voltage	0-30 VDC	N/A	N/A
Output Voltage	N/A	17.5-30 VDC, 24 VDC nominal	10.2-30 VDC, 12/24 VDC nominal
Number of Points	32	8	16
Channel to Channel Isolation	No	No	No
Load Current per Point	N/A	2.0 A per point	0.5 A per point
Input and Output Response Time-On/Off(ms)	0.5	0.5	0.2/1.0
Protection		Short circuit protection, overcurrent protection (each output)	No internal fuses (each output)
Points per Common	2 Groups of 8	1 Group of 8	1 Group of 16
On State Current	2.0-5.5 mA		
Off State Current	0-0.5 mA		
External Power Supply	None	18-30 VDC, 24 VDC nominal	10.2-30 VDC, 12/24 VDC nominal
Input Impedance	10 kOhms maximum		
Load Current		2.0 A at 30 VDC maximum (resistive) per point, 8.0 A max per module	0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms
5V Backplane Current Consumption (mA)	50 maximum	50 maximum	45 maximum
LED Indicators	One LED per point shows individual point ON/OFF status. OK LED indicates backplane power is present	One green LED per point shows individual point on/off state. One amber LED per point shows individual point overloads/short circuits. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	One LED per point shows individual point ON/OFF state. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL741	IC200MDL742	IC200MDL743
Product Name	**VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point w/ESCP, 16 points**	**VersaMax Discrete Output Module, 24 VDC Positive Logic 0.5A with ESCP, 32 points**	**VersaMax Discrete Output Module, 5/12/24 VDC Negative Logic, 0.5 A per point (1 group of 16) 16 points**
Input Voltage	N/A	N/A	N/A
Output Voltage	18-30 VDC, 24 VDC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal	5/12/24 VDC
Number of Points	16	32	16 (1 group of 16)
Channel to Channel Isolation	No	No	No
Load Current per Point	0.5 A per point	0.5 A per point	0.5 A per point
Input and Output Response Time-On/Off(ms)	0.5/0.5	0.5/0.5	0.2/1.0
Protection	Short circuit protection, overcurrent protection, free-wheeling diodes (each output)	Short circuit protection, overcurrent protection, free-wheeling diodes (each output)	No internal fuse
Points per Common	1 Group of 16		
On State Current			
Off State Current			
External Power Supply	18-30 VDC, 24 VDC nominal	18-30 VDC, 24 VDC nominal	4.75 to 5.25 VDC, 5 VDC nominal for 5 VDC-TTL mode; 10.2 to 30 VDC, 12/24 VDC nominal for 12/24 VDC mode
Input Impedance			
Load Current	0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms	0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms	25 mA maximum for 5VDC-TTL mode, 0.5 A at 30 VDC maximum, 2.0 A inrush maximum for 100 ms for 12/24 VDC mode
5V Backplane Current Consumption (mA)	75 maximum	150 maximum	70 maximum
LED Indicators	One green LED per point shows individual point on/off state. One amber LED per point shows individual point overloads. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	One green LED per point shows individual point on/off state. One amber LED per point shows individual point overloads. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	One LED per point shows individual point ON/OFF state. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL744	IC200MDL750	IC200MDL930
Product Name	**VersaMax Discrete Output Module, 5/12/24 VDC Negative Logic, 0.5 A per point (2 groups of 16) 32 points**	**VersaMax Discrete Output Module, 24 VDC Positive Logic, 0.5A per point, 32 points**	**VersaMax Discrete Output Module, Relay 2.0 A per point Isolated Form A, 8 points**
Input Voltage	N/A	N/A	N/A
Output Voltage	5/12/24 VDC	10.2-30 VDC, 12/24 VDC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Number of Points	32 (2 groups of 16)	32	8
Channel to Channel Isolation	No	No	Yes
Load Current per Point	0.5 A per point	0.5 A per point	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC
Input and Output Response Time-On/Off(ms)	0.2/1.0	0.2/1.0	10/10
Protection	No internal fuse	No internal fuses	No internal fuses or snubbers
Points per Common		2 Groups of 16	Isolated points
On State Current			
Off State Current			
External Power Supply	4.75 to 5.25 VDC, 5 VDC nominal for 5 VDC-TTL mode; 10.2 to 30 VDC, 12/24 VDC nominal for 12/24 VDC mode	10.2-30 VDC, 12/24 VDC nominal	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Input Impedance			
Load Current	25 mA maximum for 5VDC-TTL mode, 0.5 A at 30 VDC maximum, 2.0 A inrush maximum for 100 ms for 12/24 VDC mode	0.5 A at 30 VDC maximum (resistive); 2.0 A inrush maximum for 100 ms	10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive)
5V Backplane Current Consumption (mA)	140 maximum	90 maximum	245 maximum
LED Indicators	One LED per point shows individual point ON/OFF state. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	One LED per point shows individual point ON/OFF state. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	One LED per point shows individual point ON/OFF state. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.

Discrete I/O Modules

Discrete input modules receive signals from input devices such as sensors, pushbuttons, and switches that can have two states: on or off, open or closed. Discrete output modules send control signals to devices such as contactors, indicator lamps, and interposing relays that can also have two states. Discrete mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200MDL940
Product Name	**VersaMax Discrete Output Module, Relay 2.0 A per point Isolated Form A, 16 points**
Input Voltage	N/A
Output Voltage	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Number of Points	16
Channel to Channel Isolation	Yes
Load Current per Point	2.0 A for 5-265 VAC, 2.0 A for 5-30 VDC, 0.2 A for 31-125 VDC
Input and Output Response Time-On/Off(ms)	10/10
Protection	No internal fuses or snubbers
Points per Common	Isolated points
On State Current	
Off State Current	
External Power Supply	0-125 VDC, 5/24/125 VDC nominal; 0-265 VAC (47-63 Hz), 120/240 VAC nominal
Input Impedance	
Load Current	10 mA per point minimum; 2.0 A for 5-265 VAC maximum (resistive); 2.0 A for 5-30 VDC maximum (resistive); 0.2 A for 31-125 VDC maximum (resistive)
5V Backplane Current Consumption (mA)	490 maximum
LED Indicators	One LED per point shows individual point ON/OFF state. FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.

Analog I/O Modules

Analog input modules receive signals from current and voltage input devices. Specialty modules are available for RTD and Thermocouple inputs. Analog output modules provide voltage or current signals to analog output devices. Analog mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200ALG230	IC200ALG240	IC200ALG260	IC200ALG261	IC200ALG262	IC200ALG263
Product Name	**VersaMax Analog Input Module, 12 Bit Voltage/Current, 4 Channels**	**VersaMax Analog Input Module, 16 Bit Voltage/Current Isolated, 8 Channel**	**VersaMax Analog Input Module, 12 Bit Voltage/Current, 8 Channel**	**VersaMax Analog Input Module, 15 Bit Differential Voltage, 8 Channel**	**VersaMax Analog Input Module, 15 Bit Differential Current, 8 Channel**	**VersaMax Analog Input Module, 15 Bit Voltage, 15 Channel**
Input Range	± 10 VDC or 0-10 VDC	± 10 VDC, 1-20 mA	± 10 VDC or 0-10 VDC	± 10 VDC	0 to 20mA or 4 to 20mA	± 10 VDC
Output Range	N/A	N/A	N/A	N/A	N/A	N/A
Channel to Channel Isolation	No	Yes	No	No	No	No
External Power Supply	None	Range: 19.5-30 VDC including ripple; Current consumption: 100 mA maximum plus load currents	None	None	None	None
Resolution	Bipolar mode: 2.5 mV = 8 counts, Unipolar mode: 2.5 mV = 8 counts		Bipolar mode: 2.5 mV = 8 counts Unipolar mode: 2.5 mV = 8 counts	Bipolar mode: 0.3125 mV = 1 counts	4 to 20mA: 0.5micro Amp= 1 count ; 0 to 20mA: 0.625micro Amp = 1 count	Bipolar mode: 0.3125 mV = 1 count
Update Rate	0.4 ms		0.4 ms	7.5 ms	7.5 ms	7.5 ms
Accuracy at 25°C	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.1% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, 0.5% maximum ±of full scale
Input Impedance	Voltage mode: 126 kOhms maximum, Current mode: 200 Ohms maximum		Voltage mode: 126 kOhms, maximum, Current mode: 200 Ohms maximum	Voltage mode: 100 kOhms maximum	Current mode: 100 kOhms maximum	Voltage mode: 100 kOhms maximum
Input Filter Response	5.0 ms		5.0 ms			32 Hz ±20%
5V Backplane Current Consumption (mA)	125 maximum	15 maximum	130 maximum	200 maximum	200 maximum	150 maximum
3.3V Backplane Current Consumption (mA)		120 maximum				
LED Indicators	INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates the presence of both logic power and user power. OK LED indicates module status.	INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present.	INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present.	INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present.	INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present.

Analog I/O Modules

Analog input modules receive signals from current and voltage input devices. Specialty modules are available for RTD and Thermocouple inputs. Analog output modules provide voltage or current signals to analog output devices. Analog mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200ALG264	IC200ALG320	IC200ALG321	IC200ALG322	IC200ALG325	IC200ALG327
Product Name	**VersaMax Analog Input Module, 15 Bit Current, 15 Channel**	**VersaMax Analog Output Module, 12 Bit Current, 4 Channel**	**VersaMax Analog Output Module, 12 Bit 0-10V Voltage, 4 Channel**	**VersaMax Analog Output Module, 12 Bit ±10V Voltage, 4 Channel**	**VersaMax Analog Output Module, 13 Bit ±10VDC or 0 to 10VDC Voltage, 8 Channel**	**VersaMax Analog Output Module, 13 Bit ±10VDC or 0 to 10VDC Voltage, 12 Channel**
Input Range	0 to 20mA or 4 to 20mA	N/A	N/A	N/A	N/A	N/A
Output Range	N/A	4-20 mA	0-10 VDC	± 10 VDC	± 10 VDC or 0 to 10VDC	± 10 VDC or 0 to 10VDC
Channel to Channel Isolation	No	N/A	N/A	N/A	N/A	N/A
External Power Supply	None	Range: 18-30 VDC including ripple; Current consumption: 160 mA maximum including load current	Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum	Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum	Range: 18-30 VDC including ripple; Current consumption: 102 mA maximum	Range: 18-30 VDC including ripple; Current consumption: 112 mA maximum
Resolution	4 to 20mA: 0.5micro Amp= 1 count ; 0 to 20mA: 0.625micro Amp =1 count	4 uA = 8 counts	2.5 mV = 8 counts	5 mV = 16 counts	1.25 mV = 4 counts	1.25 mV = 4 counts
Update Rate	7.5 ms	0.3 ms maximum	0.3 ms maximum	0.3 ms maximum	15.0 ms maximum	10.0 ms maximum
Accuracy at 25°C	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale
Input Impedance	Current mode: 100 kOhms maximum					
Input Filter Response	24 Hz ±20%					
5V Backplane Current Consumption (mA)	100 maximum	50 maximum	50 maximum	50 maximum	50 maximum	50 maximum
3.3V Backplane Current Consumption (mA)						
LED Indicators	INT PWR LED indicates internally-generated field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present OK LED indicates backplane power is present.

Analog I/O Modules

Analog input modules receive signals from current and voltage input devices. Specialty modules are available for RTD and Thermocouple inputs. Analog output modules provide voltage or current signals to analog output devices. Analog mixed modules provide maximum flexibility by combining inputs and outputs in a single, compact module.

	IC200ALG331	IC200ALG430	IC200ALG431	IC200ALG432	IC200ALG620	IC200ALG630
Product Name	**VersaMax Analog Output Module, 14 Bit Voltage/Current 1500VAC Isolation, 8 Channel**	**VersaMax Analog Mixed Module, 12 Bit Input Current 4 Channel/Output Current 2 Channel**	**VersaMax Analog Mixed Module, 12 Bit 0-10V Input 4 Channel/Output 0-10V 2 Channel**	**VersaMax Analog Mixed Module, 12 Bit±10V Input 4 Channel/Output ±10V 2 Channel**	**VersaMax Analog Input Module, 16 Bit RTD, 4 Channel**	**VersaMax Analog Input Module, 16 Bit Thermocouple, 7 Channel**
Input Range	N/A	4-20 mA	0-10 VDC	-10 to +10 VDC	RTD	Thermocouple
Output Range	± 10 VDC, 4-20 mA	4-20 mA	0-10 VDC	-10 to +10 VDC	N/A	N/A
Channel to Channel Isolation	N/A	N/A	N/A	N/A	Yes	Yes
External Power Supply	Range: 19.5-30 VDC including ripple; Current consumption: 100 mA maximum plus load currents	Range: 18-30 VDC including ripple; Current consumption 125 mA maximum	Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum	Range: 18-30 VDC including ripple; Current consumption: 125 mA maximum	None	None
Resolution		4 uA = 8 counts	2.5 mV = 8 counts	Input: 2.5 mV = 8 counts, Output: 5 mV = 16 counts		
Update Rate		0.3 ms maximum	0.3 ms maximum	0.3 ms maximum		
Accuracy at 25°C	±0.1% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	±0.3% typical of full scale, ±0.5% maximum of full scale	Resistance: ±0.2% of reading, Temperature: ±2.0 degrees Celsius	On voltage measurement: ±0.2%, On temperature measurement: ± 3 degrees Celsius
Input Impedance		200 Ohms maximum	120 kOhms minimum	125 kOhms minimum		
Input Filter Response		5.0 ms	5.0 ms	5.0 ms		
5V Backplane Current Consumption (mA)	10 maximum	50 maximum	60 maximum	60 maximum	125 maximum	125 maximum
3.3V Backplane Current Consumption (mA)	115 maximum				125 maximum	125 maximum
LED Indicators	FLD PWR LED indicates the presence of both logic power and user power. OK LED indicates module status.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	FLD PWR LED indicates field power is present. OK LED indicates backplane power is present.	OK LED: green indicates backplane power is present. Amber indicates module fault.	OK LED: green indicates backplane power is present. Amber indicates module fault.

Expansion Modules

Expansion Modules can be used to extend a VersaMax PLC or I/O station to include up to seven additional groups of up to eight modules each, providing the architectural flexibility to accommodate larger applications.

	IC200ERM001	IC200ERM002	IC200ETM001
Product Name	**Expansion Receiver Module, Isolated**	**Expansion Receiver Module, Non-Isolated**	**Bus Transmitter Expansion Module**
Distance	Up to 2460 feet	Up to 50 feet	N/A
5V Backplane Current Consumption (mA)	430 maximum	70 maximum	44 maximum
3.3V Backplane Current Consumption (mA)	20	20	
LED Indicators	PWR LED indicates 5 VDC power status; EXP RX LED indicates status of the expansion bus; SCAN indicates whether CPU/NIU is scanning I/O in expansion racks	PWR LED indicates 5 VDC power status; EXP RX LED indicates expansion bus communications status; SCAN indicates whether CPU/NIU is scanning I/O in expansion racks	PWR LED indicates 5 VDC power status; EXP TX LED indicates expansion bus communication status

I/O Network Interface Units

An I/O Network Interface Unit connects VersaMax I/O modules to a host PLC or computer via a variety of networks, which makes it easy to include VersaMax I/O in Genius, Profibus-DP, DeviceNet, or Ethernet installations. Together, the NIU and its modules form an I/O station capable of providing up to 256 points of I/O.

	IC200DBI001	IC200EBI001	IC200GBI001
Product Name	**Remote I/O DeviceNet Network Interface Unit (Slave)**	**Remote I/O Ethernet Network Interface Unit**	**Genius Network Interface Unit**
Input Power Type	N/A	Requires Expanded 3.3 V Power Supply	N/A
Expansion Type	N/A	Expansion Racks not supported	N/A
Distance	N/A	100 Meters max	N/A
I/O Discrete Points		256 bytes %Q, 256 bytes %I	
I/O Analog Words		256 byte %AI, 256 bytes %AQ	
I/O Data		256 Bytes of input, output, Analog input and Analog output	
Type of Memory Storage		RAM	
Network Data Rate	125 Kbaud, 250 Kbaud, 500 Kbaud	10/100 Mbaud	153.6 Kbaud extended, 153.6 Kbaud standard, 76.8 Kbaud, 38.4 Kbaud
Network Topology	Linear bus (trunkline/dropline); power and signal on the same network cable	Network dependent	Bus
Transmission Media	Shielded, dual twisted pair cable, terminated at both ends	Ethernet twisted pair	Shielded, twisted pair, fiber optic
Connector	5-pin open pluggable connector	RJ-45	
User Diagnostic Data	2 bytes of status/control	4	
Number of Modules	8 per NIU/station	8 per NIU/station	8 per NIU/station
Network Inputs per Bus Scan		250 bytes	128 bytes
Network Outputs per Bus Scan		250 bytes	128 bytes
Redundancy		No	Full media and hardware redundancy supported
5V Backplane Current Consumption (mA)		175	
3.3V Backplane Current Consumption (mA)		425	
LED Indicators		5	
Protocol		• Modbus TCP • EGD	

I/O Network Interface Units

An I/O Network Interface Unit connects VersaMax I/O modules to a host PLC or computer via a variety of networks, which makes it easy to include VersaMax I/O in Genius, Profibus-DP, DeviceNet, or Ethernet installations. Together, the NIU and its modules form an I/O station capable of providing up to 256 points of I/O.

	IC200PBI001
Product Name	**Remote I/O Profibus-DP Network Interface Unit (Slave)**
Input Power Type	N/A
Expansion Type	N/A
Distance	N/A
I/O Discrete Points	
I/O Analog Words	
I/O Data	375 bytes maximum; up to 244 bytes of inputs or 244 bytes of outputs
Type of Memory Storage	
Network Data Rate	9.6 Kbaud to 12 Mbaud
Network Topology	Linear bus, terminated at both ends. Stubs are possible.
Transmission Media	Shielded, twisted pair cable
Connector	9-pin D-sub connector
User Diagnostic Data	2 bytes of status/control, 5 bytes of standard Profibus diagnostics
Number of Modules	8 per NIU/station
Network Inputs per Bus Scan	
Network Outputs per Bus Scan	
Redundancy	
5V Backplane Current Consumption (mA)	
3.3V Backplane Current Consumption (mA)	
LED Indicators	
Protocol	

Network Communications Modules

Network Communications Modules allow a VersaMax PLC to operate as a master or slave on a network. Modules currently available support DeviceNet master or slave communications and Profibus-DP slave communications. An AS-i master communications module is also available.

	IC200BEM002	IC200BEM103	IC200BEM104
Product Name	**PLC Network Communications Profibus-DP (Slave)**	**PLC Network Communications DeviceNet (Master)**	**PLC Network Communications AS-i (Master)**
Number of Stations	32 without repeaters; up to 125 with repeaters		
I/O Data	384 Bytes maximum; up to 244 bytes of inputs or 244 bytes of outputs	Up to 128 bytes of inputs and 128 bytes of outputs	4 input bits and 4 output bits per slave
Network Data Tate	9.6 Kbaud to 12 Mbaud	125 Kbaud, 250 Kbaud, 500 Kbaud	166.6Kbits/second
Network Topology	Linear bus, terminated at both ends. Stubs are possible.	Linear bus (trunkline/dropline); power and signal on the same network cable	Tree Structure
Transmission Media	Shielded, twisted pair cable	Shielded, twisted pair cable	Rubber coated two wire cable
Connector	9-pin D-sub connector		
Number of Nodes		Supports up to 40 slave devices	Supports up to 31 slave devices
User Diagnostic Data		One presence bit per slave device	Display data
Power Consumption	460 mA maximum from 5 V output, 5 mA from +3.3 V output	490 mA maximum from 5 V output, 2 mA from +3.3 V output	350 mA maximum from 5 V output

Accessories

IC200ACC001	Replacement Battery for VersaMax CPUs
IC200ACC003	EZ Program Store, CPU RS485 Port Update Device
IC200ACC201	Expansion Terminator QTY 1
IC200ACC202	Expansion Connector QTY 2
IC200ACC301	I/O Filler Module
IC200ACC302	I/O Input Simulator
IC200ACC303	I/O Shorting Bar QTY 2

Cables

IC200CBL600	Cable Expansion Shielded Single Ended 1M
IC200CBL601	Cable Expansion Shielded 2 Connectors 1M
IC200CBL602	Cable Expansion Shielded 2 Connectors 2M
IC200CBL615	Cable Expansion Shielded 2 Connectors 15M
IC200ACC304	I/O Cable Connector Kit QTY 2

Starter Kits

IC200PKG001	PLC Starter Kit CPU001
IC200PKG101	I/O Starter Kit GENIUS
IC200PKG102	I/O Starter Kit Profibus-DP
IC200PKG103	I/O Starter Kit DeviceNet