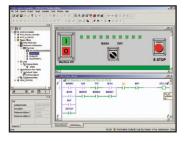




# VersaMax® Nano and Micro Controllers

**Don't let size fool you.** Although they're easy on valuable panel space, the VersaMax® Nano and Micro PLCs are big on features. For high-volume applications where cost and fast processor speeds are an issue, the palm-sized VersaMax Nano is the PLC of choice. When you need additional functionality, the modular VersaMax Micro offers the features and the flexibility to match your application needs. Both these compact PLCs offer ease-of-use and long-term reliability to further decrease your life-cycle costs.

configurations.



Pick the Palm-Sized PLC That's Light on Your Budget. For tight spaces, the VersaMax Nano PLC is the perfect solution. Thanks to its all-in-one construction, installation is a breeze. All you have to do is snap it onto a DIN-rail or screw it into a panel. With the VersaMax Nano, you save on initial as well as life-cycle costs.

#### Select the Big-Featured PLC in a Compact Package.

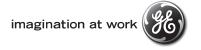
The small footprint VersaMax Micro PLC offers the flexibility of modular design and a variety of built-in features, including up to 28 I/O points (expandable to 140 I/O points), fast cycle times, a robust instruction set and extensive memory that multiplies your programming options.

**Take Advantage of a Host of Communications Options.** Both the VersaMax Nano and Micro have an RS-232 port that can be used for SNP slave, Modbus RTU slave or serial I/O commands. The 23- and 28-point versions of the Micro also have an RS-485 port that adds SNP master commands. With serial I/O commands, you can interface with such devices as pagers, intelligent scales, bar code readers and printers. The VersaMax Nano and Micro can easily be networked to Ethernet utilizing the powerful VersaMax SE (Serial to Ethernet module).

**Tap the Perfect Solution for Low-End Motion Applications.** Both the VersaMax Nano and Micro can be used with either a PWM or a pulse train device. In addition, both controllers come with built-in high-speed counters that can be used in either Type A or Type B

Program Your Controllers in Record Time. With GE Fanuc's VersaPro™ or CIMPLICITY® Machine Edition software, programming your VersaMax Nano and Micro PLCs is a simple and 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.

Easy Trouble Shooting and Machine Setup Using a Handheld PDA. CIMPLICITY® Machine Edition Logic Developer PDA software allows you to interface a Palm® handheld device to your VersaMax Micro and Nano. With Logic Developer PDA, you can monitor/change data, view diagnostics, force ON/OFF, and configure machine setup — saving you time and increasing productivity.



Description	Catalog Number	
VersaMax Nano	IC200NAL110	10 Point (6) 12 VDC In, (1) Analog In 0 - 10 VDC (8 bit), (4) Relay Out, 12 VDC Power Supply
CPU with 10 Points of I/O	IC200NAL211	10 Point (6) 24 VDC In, (1) Analog In 0 - 10 VDC (8 bit), (4) Relay Out, 24 VDC Power Supply
	IC200NDD010	10 Point (6) 12 VDC In, (4) 12 VDC Out, 12 VDC Power Supply
	IC200NDD101	10 Point (6) 24 VDC In, (4) 24 VDC Out, 24 VDC Power Supply
	IC200NDR001	10 Point (6) 24 VDC In, (4) Relay Out, 24 VDC Power Supply
	IC200NDR010	10 Point (6) 12 VDC In, (4) Relay Out, 12 VDC Power Supply
VersaMax Micro	IC200UAA003	14 Point (8) 120 VAC In, (6) 120 VAC Out, 120/240 VAC Power Supply
CPUs with I/O	IC200UAR014	14 Point (8) 120 VAC In, (2) Relay Out at 10 Amp, (4) Relay Out at 2 Amp, 120/240 VAC Power Supply
14 Point with Expansion and (1) Serial Port	IC200UDD104	14 Point (8) 24 VDC In, (6) 24 VDC Out 2 at 1.0 Amp and 4 at 0.5 Amp, 24 VDC Power Supply
2.12 (1) 22.12.1	IC200UDD112	14 Point (8) 12 VDC In, (6) 12 VDC Out, 12 VDC Power Supply
	IC200UDR001	14 Point (8) 24 VDC In, (6) Relay Out, 120/240 VAC Power Supply
	IC200UDR002	14 Point (8) 24 VDC In, (6) Relay Out, 24 VDC Power Supply
	IC200UDR003	14 Point (8) 12 VDC In, (6) Relay Out, 12 VDC Power Supply
*23 Point with	IC200UAL004	23 Point (13) 12 VDC In, (10) Relay Out, (2) Analog In and (1) Analog Out, 12 VDC Power Supply
Analog, Expansion and	IC200UAL005	23 Point (13) 24 VDC In, (1) 24 VDC Out, (9) Relay Out, (2) Analog In and (1) Analog Out, 24 VDC Power Supply
(2) Serial Ports	IC200UAL006	23 Point (13) 24 VDC In, (9) Relay Out, (1) 24 VDC Out, (2) Analog In and (1) Analog Out, 120/240 VAC Power Supply
*28 Point with	IC200UAA007	28 Point (16) 120 VAC In, (12) 120 VAC Out, 120/240 VAC Power Supply
Expansion and	IC200UAR028	28 Point (16) 120 VAC In, (2) Relay Out at 10 Amp, (10) Relay Out at 2 Amp, 120/240 VAC Power Supply
(2) Serial Ports	IC200UDD110	28 Point (16) 24 VDC In, (12) 24 VDC Out, 6 at 1.0 Amp and, 6 at 0.5 Amp, 24 VDC Power Supply
	IC200UDD120	28 Point (16) 24 VDC In, (12) 24 VDC Out with ESCP, 24 VDC Power Supply
	IC200UDR005	28 Point (16) 24 VDC In, (11) Relay Out, (1) 24 VDC Out, 120/240 VAC Power Supply
	IC200UDR006	28 Point (16) 12 VDC In, (12) Relay Out, 12 VDC Power Supply
	IC200UDR010	28 Point (16) 24 VDC In, (11) Relay Out, (1) 24 VDC Out, 24 VDC Power Supply
	IC200UDD212	28 Point (16) 12 VDC In, (12) 12 VDC Out, 24 VDC Power Supply
VersaMax Micro	IC200UEX009	14 Point (8) 120 VAC In, (2) Relay Out at 10 Amp, (4) Relay Out at 2 Amp, 120/240 VAC Power Supply
Expansion Units	IC200UEX010	14 Point (8) 120 VAC In, (6) 120 VAC Out, 120/240 VAC Power Supply
14 Point	IC200UEX011	14 Point (8) 24 VDC In, (6) Relay Out, 120/240 VAC Power Supply
	IC200UEX012	14 Point (8) 24 VDC In, (6) Relay Out, 24 VDC Power Supply
	IC200UEX013	14 Point (8) 12 VDC In, (6) Relay Out. 12 VDC Power Supply
	IC200UEX014	14 Point (8) 24 VDC In, (6) 24 VDC Out, 24 VDC Power Supply
	IC200UEX015	14 Point (8) 12 VDC In, (6) 12 VDC Out, 12 VDC Power Supply
	IC200UEX122	14 Point (8) 24 VDC In, (6) 24 VDC Out with ESCP, 24 VDC Power Supply
28 Point	IC200UEX209	28 Point (16) 120 VAC In, (4) Relay Out at 10 Amp, (8) Relay Out at 2 Amp, 120/240 VAC Power Supply
	IC200UEX210	28 Point (16) 120 VAC In, (12) 120 VAC Out, 120/240 VAC Power Supply
	IC200UEX211	28 Point (16) 24 VDC In, (12) Relay Out, 120 VAC Power Supply
	IC200UEX212	28 Point (16) 24 VDC In, (12) Relay Out, 24 VDC Power Supply
	IC200UEX213	28 Point (16) 12 VDC In, (12) Relay Out, 12 VDC Power Supply
	IC200UEX214	28 Point (16) 24 VDC In, (12) 24 VDC Out, 24 VDC Power Supply
	IC200UEX215	28 Point (16) 12 VDC In, (12) 12 VDC Out, 12 VDC Power Supply
	IC200UEX222	28 Point (16) 24 VDC In, (12) 24 VDC Out with ESCP, 24 VDC Power Supply
Analog Expansion	IC200UEX616	6 Channel Analog Combination, 4 Analog In, 2 Analog Out, 12 VDC Power Supply
	IC200UEX626	6 Channel Analog Combination, 4 Analog In, 2 Analog Out, 24 VDC Power Supply
	IC200UEX636	6 Channel Analog Combination, 4 Analog In, 2 Analog Out, 120/240 VAC Power Supply
	IC200UEX724	4 Channel RTD -100 to +600°C (PT100 2 and 3 wire), 24 VDC Power Supply
	IC200UEX734	4 Channel RTD -100 to +600°C (PT100 2 and 3 wire), 120/240 VAC Power Supply
	IC200UEX726	4 Channel RTD -100 to +600°C (PT100 2 and 3 wire), 2 Analog Out, 24 VDC Power Supply
	IC200UEX736	4 Channel RTD -100 to +600°C (PT100 2 and 3 wire), 2 Analog Out, 120/240 VAC Power Supply
Communications	IC200SET001	Ethernet Interface, Bridge from RS-232 or RS-485 Serial to Ethernet 10/100 BaseT, 12/24 VDC Power Supply
Communications		
Accessories	BC646MPH101	Logic Developer PDA software tool with cable adapter

 $<sup>^{\</sup>ast}$  Battery (IC200ACC403) is required for long term data retention. Battery not included.



#### **GE Fanuc Automation Information Centers**

USA and the Americas: 1-800-GE FANUC or (434) 978-5100

Europe, Middle East and Africa: (352) 727979-1

Asia Pacific: 86-21-3222-4555

#### **Additional Resources**

For detailed technical specifications and product ordering information, please visit the GE Fanuc e-catalog at:





# VersaMax® I/O and Control

**Maximum versatility** is the guiding principle behind VersaMax® from GE Fanuc. This compact, extremely affordable control solution can be used as a PLC, as I/O, and as distributed control. With its modular and scaleable architecture, intuitive features and unparalleled ease of use, this innovative control family can save machine builders and end users considerable time and money.



Offering Big PLC Power in a Small Package. 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, real-time clock, subroutines, PID control, flash memory, and bumpless program store.

The serial ports support serial read/write and Modbus master/slave communications.

**An Abundance of Useful I/O Options.** GE Fanuc offers a broad range of discrete, analog, mixed, and specialty I/O modules. These modules can be freely combined to create stand-alone I/O stations with up to 256 I/O points and expanded I/O systems with up to 4,096 I/O points.

#### The Perfect Match for Today's Open Systems.

VersaMax gives you the freedom to connect to a wide variety of host controllers, including PLC, DCS and PC-based control systems by way of Genius®, DeviceNet™, Profibus-DP™ and Ethernet networks. VersaMax also fully supports the power and open architecture of GE Fanuc's PC Control solutions.

#### The Ultimate in Cost-effective Control and I/O.

With intuitive diagnostics, hot insertion of modules and quick connect wiring, VersaMax extends uptime, reduces engineering and training needs, and dramatically reduces project life-cycle costs.

A Design that Maximizes Ease of Use. Every aspect of VersaMax has been carefully refined to accommodate the user. Snap-together I/O carriers mean that no tools are required for module installation or extraction. A convenient rotary switch can be used for setting bus addresses, reducing programming time. With VersaMax, you can even address I/O automatically.

Easy Trouble Shooting and Machine Setup Using a Handheld PDA. CIMPLICITY® Machine Edition Logic Developer PDA software allows you to interface a Palm® handheld device to your VersaMax controller. With Logic Developer PDA, you can monitor/change data, view diagnostics, force ON/OFF, and configure machine setup — saving you time and increasing productivity.



Description	Catalog Number		Catalog Number	
Discrete Input Moduleš™	IC200MDL140	Input 120 VAC (1 Group of 8) 8 Points	IC200MDL631	Input 125 VDC Pos/Neg Logic Isolated 8 Points
	IC200MDL141	Input 240 VAC (1 Group of 8) 8 Points	IC200MDL632	Input 125 VDC Pos/Neg Logic Isolated 16 Points
	IC200MDL143	Input 120 VAC Isolated 8 Points	IC200MDL635	Input 48 VDC Pos/Neg Logic (2 Groups of 8) 16 Points
	IC200MDL144	Input 240 VAC Isolated 4 Points	IC200MDL636	Input 48 VDC Pos/Neg Logic (2 Groups of 8) 16 Points
	IC200MDL240	Input 120 VAC (2 Groups of 8) 16 Points	IC200MDL640	Input 24 VDC Pos/Neg Logic (2 Groups of 8) 16 Points
	IC200MDL241	Input 240 VAC (2 Groups of 8) 16 Points	IC200MDL643	Input 5/12 VDC Pos/Neg Logic (2 Groups of 8) 16 Points
	IC200MDL243	Input 120 VAC Isolated 16 Points	IC200MDL644	Input 5/12 VDC Pos/Neg Logic (4 Groups of 8) 32 Points
	IC200MDL244	Input 240 VAC Isolated 8 Points	IC200MDL650	Input 24 VDC Pos/Neg Logic (4 Groups of 8) 32 Points
Discrete Output Modules(1)	IC200MDL329	Output 120 VAC 0.5 Amp per Point Isolated 8 Points	IC200MDL741	Output 24 VDC Pos Logic 0.5 Amp per Point with ESCP 16 Points
	IC200MDL330	Output 120 VAC 0.5 Amp per Point Isolated 16 Points	IC200MDL742	Output 24 VDC Pos Logic 0.5 Amp per Point with ESCP 32 Points
	IC200MDL331	Output 120 VAC 2.0 Amp per Point Isolated 8 Points	IC200MDL743	Output 5/12/24 VDC Neg Logic 0.5 Amp per Point 16 Points
	IC200MDL730	Output 24 VDC Pos Logic 2.0 Amp per Point with ESCP 8 Points	IC200MDL744	Output 5/12/24 VDC Neg Logic 0.5 Amp per Point 32 Points
	IC200MDL740	Output 12/24 VDC Pos Logic 0.5 Amp per Point 16 Points	IC200MDL750	Output 12/24 VDC Pos Logic 0.5 Amp per Point 32 Points
elay Output Modules(1)	IC200MDL930	Output Relay 2.0 Amp per Point Isolated Form A 8 Points	IC200MDL940	Output Relay 2.0 Amp per Point Isolated Form A 16 Points
Mixed Discrete Modules <sup>(1)</sup>	IC200MDD840	Mixed 24 VDC Pos Logic Input Grouped 20 Points / Output Relay 2.0 Amp per Point Grouped 12 Points	IC200MDD846	Mixed Output Relay 2.0 Amp per Point Isolated 8 Points / Input 120 VAC Grouped 8 Points
	IC200MDD841	Mixed 24 VDC Pos Logic Input Grouped 20 Points / Output Grouped 12 Points/HSC/PWM/PT	IC200MDD847	Mixed Output Relay 2.0 Amp per Point Isolated 8 Points / Input 240 VAC Grouped 8 Points
	IC200MDD842	Mixed 24 VDC Pos Logic Output 0.5 Amp Grouped with ESCP 16 Points / Input Grouped 16 Points	IC200MDD848	Mixed Output 120 VAC 0.5 Amp per Point Isolated 8 Points / Input 120 VAC Grouped 8 Points
	IC200MDD843	Mixed 24 VDC Pos Logic Input Grouped 10 Points / Output Relay 2.0 Amp per Point Grouped 6 Points	IC200MDD849	Mixed Output Relay 2.0 Amp per Point Isolated 8 Points / Input 120 VAC Isolated 8 Points
	IC200MDD844	Mixed 24 VDC Pos Logic Output 0.5 Amp Grouped 16 Points / Input Grouped 16 Points	IC200MDD850	Mixed Output Relay 2.0 Amp per Point Isolated 8 Points / Input 240 VAC Isolated 4 Points
	IC200MDD845	Mixed Output Relay 2.0 Amp per Point Isolated 8 Points / Input 24 VDC Pos Logic Grouped 16 Points	IC200MDD851	Mixed 12/24VDC Pos Logic Output 0.5 Amp per Point Grouped 16 Points/Input 5/12VDC Pos/Neg Logic Grouped 16 PT
nalog Input Modules <sup>(1)</sup>	IC200ALG230	Analog Input 12 Bit Voltage/Current 4 Channels	IC200ALG263(6)	Analog Input 15 Bit Voltage 15 Channels
	IC200ALG240	Analog Input 16 Bit Voltage/Current Isolated 8 Channels	IC200ALG264 <sup>(6)</sup>	Analog Input 15 Bit Current 15 Channels
	IC200ALG260	Analog Input 12 Bit Voltage/Current 8 Channels	IC200ALG620	Analog Input 16 Bit RTD 4 Channels
	IC200ALG261 ***	Analog Input 15 Bit Differential Voltage 8 Channels	IC200ALG630	Analog Input 16 Bit Thermocouple 7 Channels
	IC200ALG262 <sup>(6)</sup>	Analog Input 15 Bit Differential Current 8 Channels		
nalog Output Modules"	IC200ALG320	Analog Output 12 Bit Current 4 Channels	IC200ALG326(6)	Analog Output 13 Bit Current 8 Channels
	IC200ALG321	Analog Output 12 Bit Voltage 0-10 V 4 Channels	IC200ALG327(6)	Analog Output 13 Bit Voltage 12 Channels
	IC200ALG322	Analog Output 12 Bit Voltage ±10 V 4 Channels	IC200ALG328(6)	Analog Output 13 Bit Current 12 Channels
	IC200ALG325 <sup>(6)</sup>	Analog Output 13 Bit Voltage 8 Channels	IC200ALG331	Analog Output 16 Bit Voltage/Current Isolated 4 Channels
lixed Analog Modules"	IC200ALG430	Analog Mixed 12 Bit Current 4 Input / 2 Output Channels	IC200ALG432	Analog Mixed 12 Bit Voltage ±10 V 4 Input / 2 Output Channels
	IC200ALG431	Analog Mixed 12 Bit Voltage 0-10 V 4 Input / 2 Output Channels		
O Carriers	IC200CHS001	Barrier Horizontal Style	IC200CHS005	Spring Clamp Horizontal Style
	IC200CHS002	Box Horizontal Style	IC200CHS022	Box Vertical Style
	IC200CHS003 <sup>(4)</sup>	Connector Vertical Style	IC200CHS025	Spring Clamp Vertical Style
etwork Interface Units	IC200DBI001 <sup>(2)</sup>	Remote I/O DeviceNet Network Interface Unit	IC200GBI001	Remote I/O Genius Network Interface Unit
	IC200EBI001 (5)	Remote I/O Ethernet Network Interface Unit	IC200PBI001	Remote I/O Profibus-DP Network Interface Unit
etwork Communication Modules <sup>(3)</sup>	IC200BEM002	PLC Network Communication Profibus-DP Slave	IC200BEM104	PLC Network Communications AS-i Master
	IC200BEM103	PLC Network Communication DeviceNet (Master/Slave)		
ontrollers	IC200CPU001	CPU 34 Kbyte Configurable Memory, Two Serial Ports (RS-232 and RS-485)	IC200CPU005	CPU with 64 Kbyte Configurable User Memory, Two Serial Ports (RS-232 and RS-485)
	IC200CPU002	CPU 42 Kbyte Configurable Memory, Two Serial Ports (RS-232 and RS-485)	IC200CPUE05	CPU with 64 Kbyte Configurable User Memory, Two Serial Ports (RS-232 and RS-485), 10 MBIT Ethernet Port
ower Supplies	IC200PWR001	Power Supply 24 VDC Input	IC200PWR102	Power Supply 120/240 VAC Input with Expanded 3.3 VDC
	IC200PWR002	Power Supply 24 VDC Input with Expanded 3.3 VDC	IC200PWR201	Power Supply 12 VDC Input
	IC200PWR101	Power Supply 120/240 VAC Input	IC200PWR202	Power Supply 12 VDC Input with Expanded 3.3 VDC
ccessories	IC200ACC003	EZ Program Store Flash Device for CPUs	IC200ERM001(6)	I/O Expansion Receiver Isolated (Up to 750 meters)
	IC200CBL001	CPU Programming Cable (RS-232)	IC200ERM002 <sup>(6)</sup>	I/O Expansion Receiver Non-Isolated (Up to 15 meters)

#### **GE Fanuc Automation Information Centers**

#### USA and the Americas: 1-800-GE FANUC or (434) 978-5100

## Europe, Middle East and Africa: (352) 727979-1

Asia Pacific: 86-21-3222-4555

#### **Additional Resources**

For detailed technical specifications and product ordering information, please visit the GE Fanuc e-catalog at:



<sup>(1)</sup> Requires an I/O carrier for wiring termination.
(2) The DeviceNet network interface unit only supports autoconfiguration of I/O. Remote I/O configuration tool will be supported in the future. (3) These modules are for use in CPU systems.

<sup>(4)</sup> Refer to VersaMax Modules, Power Supplies, and Carriers Manual GFK-1504 for cables and Interposing Terminal Blocks. (5) Includes support for EGD and Modbus Ethernet.

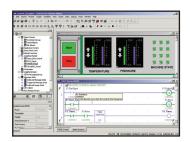
<sup>(6)</sup> Supported by CPUs, Genius, Profibus and Ethernet NIUs only.





# Series 90™-30 PLCs

The Series 90™-30 PLC is a family of controllers, I/O systems and specialty modules designed to meet the demand for versatile industrial solutions. With its single overall control architecture, the Series 90-30 has been the PLC of record in over 200,000 applications, such as high-speed packaging, material handling, complex motion control, water treatment, continuous emissions monitoring, mining, food processing, elevator control, injection molding and many more.



Thanks to its modular design, the Series 90-30 offers unmatched versatility. Configure just the system you need, saving critical space and reducing cost.

With over 100 I/O modules, the Series 90-30 PLC can be adapted to a wide range of applications.

- Digital interfaces for push buttons, switches, proximity sensors, relays, contactors and many other devices
- Analog modules with varying degrees of resolution for flow, temperature or pressure applications
- Direct connect wiring or remote termination
- Local or remote I/O systems

Series 90-30 Ethernet communications provide a realtime link between the plant floor and the boardroom. You can begin with an Ethernet-enabled CPU, or at a later date, choose from our selection of rack-mounted Ethernet modules. The Series 90-30 Ethernet module supports both SRTP and Modbus TCP/IP application protocols.

The scaleable processing power in the Series 90-30 CPU creates a clear upgrade path. Create the system that's ideal today, while leaving open the option of creating a more powerful system tomorrow — without having to change your application software.

**Motion control integrated into the Series 90-30** fosters high performance point-to-point applications.

A variety of Series 90-30 field bus interfaces enables distributed control and/or I/O. Choose from Ethernet EGD, Profibus-DP™, Genius®, DeviceNet™ and Interbus-S™ modules. Field Bus interface modules are easy to install and quick to configure. Plug them into an existing system or design a new system around them.

# Programming your Series 90-30 PLC is easy with CIMPLICITY Machine Edition Logic Developer-PLC.

With the most advanced PLC programming tools on the market today, Logic Developer-PLC is an integrated solution for PLC and remote I/O hardware configuration, PLC programming languages, application development, and on-line diagnostics. Supported programming languages include Ladder Diagram (LD), Instruction List (IL), Structural Text (ST), and C Block.

The Series 90-30 stands out among small controls for offering redundancy options. The Series 90-30 is the low-cost solution for high availability applications, with redundant CPUs and power supplies.

Easy trouble shooting and machine setup using a handheld PDA. CIMPLICITY® Machine Edition Logic Developer PDA software allows you to interface a Palm® handheld device to your Series 90-30 controller. With Logic Developer PDA, you can monitor/change data, view diagnostics, force ON/OFF, and configure machine setup — saving you time and increasing productivity.



	Catalog Number	Description	Catalog Number	Description
Discrete Input Modules	IC693MDL230	120 VAC Isolated Input (8 Points)	IC693MDL646	24 VDC Input, Neg/Pos Logic, 1 msec Filter (16 Points)
	IC693MDL231	240 VAC Isolated Input (8 Points)	IC693MDL648	48 VDC Input, Neg/Pos Logic, 1 msec filter, Neg/Pos Logic (16 Points)
	IC693MDL240	120 VAC Input (16 Points)	IC693MDL653	24 VDC Input, Neg/Pos Logic, 2msec Filter (32 Points)
	IC693MDL241	24 VAC/VDC Input (16 Points)	IC693MDL654	5/12 VDC (TTL) Input, Neg/Pos Logic, (32 Points)
2	IC693MDL632	125 VDC Input (8 Points)	IC693MDL655	24 VDC Input, Neg/Pos Logic, 1 ms, (32 Points)
	IC693MDL634	24 VDC Input, Neg/Pos Logic (8 Points)	IC693ACC300	Input Simulator Module (8 Points)
	IC693MDL645	24 VDC Input, Neg/Pos Logic (16 Points)	10033A00300	input dimulator widule (or dima)
			ICCOMADI 740	13/34 VDC Outsut O.F. Assa Davidina Lavia (10 Davida)
Discrete Output Modules	IC693MDL310	120 VAC Output, 0.5 Amp (12 Points)	IC693MDL740	12/24 VDC Output, 0.5 Amp, Positive Logic (16 Points)
	IC693MDL330	120/240 VAC Output, 2 Amp (8 Points)	IC693MDL741	12/24 VDC Output, 0.5 Amp, Negative Logic (16 Points)
	IC693MDL340	120 VAC Output, 0.5 Amp (16 Points)	IC693MDL742	12/24 VDC Output, 1 Amp, Positive Logic (16 Points), Fused
	IC693MDL390	120/240 VAC Isolated Output, 2 Amp (5 Points)	IC693MDL748	48 VDC Output, 0.5 Amps, Positive Logic (8 Points)
	IC693MDL730	12/24 VDC Output, 2 Amp, Positive Logic (8 Points)	IC693MDL750	12/24 VDC Output, Negative Logic (32 Points)
	IC693MDL731	12/24 VDC Output, 2 Amp, Negative Logic (8 Points)	IC693MDL751	12/24 VDC Output, Positive Logic (32 Points)
	IC693MDL732	12/24 VDC Output, 0.5 Amp, Positive Logic (8 Points)	IC693MDL752	5/12/24 VDC (TTL) Output, Negative Logic, (32 Points)
	IC693MDL733	12/24 VDC Output, 0.5 Amp, Negative Logic (8 Points)	IC693MDL753	12/24 VDC Output, Positive Logic (32 Points)
	IC693MDL734	125 VDC Output, (6 Points)		
Relay Output Modules	IC693MDL930	Relay Output, Isolated, 4 Amp (8 Points)	IC693MDL940	Relay Output, 2 Amp (16 Points)
noidy output moduloo	IC693MDL931	Relay Output, 8 Amp Form B/C contacts, Isolated in 2 Groups of 4 (8 Points)	1000011152010	notal output 27 mip (10 1 onto)
Mixed Discrete Modules	IC693MDR390		IC693MAR590	Mixed I/O 120 VAC Input /9 Boints\ Polov Output /9 Boints\
Mixen Discrete Monnies	ICOSSIVIDASSO	Mixed I/O, 24 VDC Input (8 points), Relay Output (8 points)	10033IVIAN330	Mixed I/O, 120 VAC Input (8 Points), Relay Output (8 Points)
Analog Input Modules	IC693ALG220	Analog Input, Voltage/Current, 4 Channels	IC693ALG222	Analog Input, Voltage 16 Single/8 Differential Channels
	IC693ALG221	Analog Input, Current, 4 Channels	IC693ALG223	Analog Input, Current, 16 Single Channels
Analog Output Modules	IC693ALG390	Analog Output, Voltage, 2 Channels	IC693ALG392	High Density Analog Output (8 Channels)
	IC693ALG391	Analog Output, Current, 2 Channels		
Mixed Analog Modules	IC693ALG442	Analog Combo Module 4IN/20UT		
Motion Modules	IC693APU300	High Speed Counter (HSC)	IC693APU305	High Speed Counter with Gray Code Encoder or an A QUAD B Encoder Input
	IC693APU301	Axis Positioning Module (APM), 1 Axis	IC693DSM302	Digital Servo Motion Controller, 2 Axis
	IC693APU302	Axis Positioning Module (APM), 2 Axis	IC693DSM314	Digital Servo Motion Controller, 1-2 Axis of Digital Servo or 1-4 Axis Analog Servo
Casaiale, Madulas		Solenoid Valve Output (11 Points)/24 VDC Output, 0.5 Amp, Positive Logic (5 Points)		Power Transducer Module, CT and PT Interface 120/240 VAC (1m cable)
Specialty Modules	IC693MDL760		IC693PTM101	
	IC693PCM301	Programmable Coprocessor Module, 192 KB (47 KB Basic or C Program), 2 Serial Ports	IC693TCM302	Temperature Control Module, (8) TC In and (8) 24 VDC Solid State Outputs
	IC693PCM311	Programmable Coprocessor Module, 640 KB (640 KB Basic or C Program), 2 Serial Ports	IC693TCM303	Temperature Control Module Extended Temperature Range, (8) TC In and
	IC693PTM100	Power Transducer Module, CT and PT Interface 120/240 VAC (0.5m Cable)		(8) 24 VDC Solid State Outputs
Communications Modules	IC693BEM331	Genius Bus Controller (Supports I/O and Datagrams)	IC693PBM200	Profibus DP Master Module
	IC693CMM302	Communication Module, Genius (1 Kbyte) GCM+ (No Datagram Support)	IC693PBM201	Profibus DP Slave Module
	IC693CMM311	Communications Module, CCM, RTU, SNP, and SNPx Protocols	IC693DNM200	DeviceNet Master Module
	IC693CMM321	Ethernet Interface TCP/IP Module, 10Mbs (Supports SRTP and Modbus TCP/IP, No EGD)	IC693DNS201	DeviceNet Slave Module
Remote I/O	IC693NIU004	Ethernet Network Interface Unit. Two Ethernet ports, one connection (one IP) with		
		built in switch. Requires IC693CHS397 (5 slot rack) or IC693CHS391 (10 slot rack)		
		and a Series 90-30 high capacity power supply.		
Controllers	ICC02CDI  211		ICC02CDI I2C0	CRIL 250 Medula (240// Pytos Configurable Hear Memory 4// I/O 8 Poeks)
Controllers	IC693CPU311	5-Slot Base with CPU in Base (6KBytes User Program), Not Expandable	IC693CPU360	CPU 360 Module (240KBytes Configurable User Memory, 4K I/O, 8 Racks),
	1000-			No Built-In Serial Ports, Logic Execution is .22msec/K
	IC693CPU313	5-Slot Base with Turbo CPU in Base (Logic Execution is .6 msec), 1K Registers,	IC693CPU363	CPU 363 Module (240KBytes Configurable User Memory 4K I/O, 8 Racks),
		(12KBytes User Program), Not Expandable		2 Built-In Serial Ports, Logic Execution is .22msec/K
	IC693CPU323	10-Slot Base with Turbo CPU in Base (Logic Execution is .6 msec) 12Kbytes	IC693CPU364	CPU 364 Module (240KBytes Configurable User Memory 4K I/O, 8 Racks), No Built-In Serial Ports
		User Program, Not Expandable		Built-In 10Mbs Ethernet, Supports SRTP, Channels and EGD, Logic Execution is .22msec/l
	IC693CPU350	CPU 350 Module (32KBytes User Memory, 4K I/O, 8 Racks), No Built-In Serial Ports,	IC693CPU374	CPU 374 Module (240KBytes Configurable User Memory), No Built-In Serial Ports,
		Logic Execution is .22msec/K		Built-In 10/100Mbs with Built-In Switch, Ethernet Supports SRTP, EGD and No Channel
				Support; Logic Execution is .22msec/K.
Backplanes	IC693CHS391	Base, CPU, 10 Slots, Use with CPU331/CSE331 and above	IC693CHS397	Base, CPU, 5 Slots (use with CPU331/CSE331 and above)
Баскрівнез			IC693CHS398	
	IC693CHS392	Base, Expansion, 10 Slots		Base, Expansion, 5 Slots
	IC693CHS393	Base, Remote Expansion, 10 Slots (700 ft.)	IC693CHS399	Base, Remote Expansion, 5 Slots (700 ft.)
Power Supplies	IC693PWR321	Power Supply, 120/240 VAC, 125 VDC, Standard, 30 Watts	IC693PWR332	Power Supply, 12 VDC, High Capacity, 30 Watts
	IC693PWR322	Power Supply, 24/48 VDC, Standard, 30 Watts	IC693ACC340	Redundant Power Supply Base (RPSB) with 0.1 meter cable to connect to Power Supply Adapter Modul
	IC693PWR328	Power Supply, 48 VDC, Standard, 30 Watts	IC693ACC341	Redundant Power Supply Base with 0.5 meter cable to connect to Power Supply Adapter Modul
	IC693PWR330	Power Supply, 120/240 VAC, 125 VDC, High Capacity, 30 Watts	IC693ACC350	Redundant Power Supply Adapter (RPSA) Module. The RPSA replaces the power supply
	IC693PWR331	Power Supply, 24 VDC, High Capacity, 30 Watts		on a CPU base or expansion base and connects to a Redundant Power Supply Base.
Accessories	IC693ACC301	Replacement Battery, CPU & PCM (Qty. 2)	IC693CBL301	Rack to Rack Expansion Cable, 2 Meters
	IC693ACC302	High Capacity Battery Pack	IC693CBL302	Rack to Rack Expansion Cable, 15 Meters
	IC200ACC003	EZ Program Store Flash Device (for CPU374 only)	IC693CBL302	Rack to Rack Expansion Cable, 0.15 Meters, Shielded
		-		·
	IC693ACC310	Filler Module, Blank Slot	IC693CBL313	Rack to Rack Expansion Cable, 8 Meters
	IC693CBL300	Rack to Rack Expansion Cable, 1 Meter	IC693CBL314	Rack to Rack Expansion Cable, 15 Meters, Shielded
Programming and	IC646MPP001	Logic Developer - PLC Professional	IC646MPH101	Logic Developer PDA Software Tool with Cable Adapter
Trouble Shooting Tools	IC646MPS001	Logic Developer - PLC Standard		



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#### **Additional Resources**

For detailed technical specifications and product ordering information, please visit the GE Fanuc e-catalog at:

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# Series 90™-70 PLCs

With its superior performance, power, and flexibility, GE Fanuc's Series 90™-70 PLC provides a comprehensive solution that's equal to the most demanding applications. With our CPX family of CPUs, the Series 90-70 offers more for your automation dollar—more computing power, more memory for your applications, and more communications and redundancy capabilities. And with a wide range of isolated and high-density VME analog I/O modules, the Series 90-70 provides even more flexibility for a variety of applications.



Open Architecture Lets You Do it Your Way. Based on the VME-bus standard, the Series 90-70 can be used with thousands of boards produced by hundreds of different manufacturers to craft the solution that meets your exact needs. These include links to drives and drive systems, servo-motor con-

trollers, embedded solutions for vision systems and busto-bus interface modules, as well as a variety of modules available from GE Fanuc (see back).

Choose the Degree of Redundancy You Need for Critical Applications. Combining the Series 90-70 PLC with the advanced functionality of Genius® I/O, GE Fanuc Genius Modular Redundancy (GMR) systems and Hot Standby systems can provide as much or as little redundancy as necessary.

 The versatility and strength of Genius Modular Redundancy make it an ideal choice for rigorous emergency shutdown and human life protection systems. The GMR System has a class 6 TÜV rating.

- Based on three isolated PLCs and extensive diagnostics, the GMR triple modular redundancy system uses twoout-of-three voting to provide high reliability and errorfree operation.
- CPU Genius Redundancy (CGR) systems achieve enhanced hot standby CPU redundancy by connecting two power supplies and two CGR CPUs to one or more Genius I/O networks.

Power, Speed and a Variety of Communications Options Yield Exceptional Versatility for a Host of Demanding Applications.

- Offers a wide variety of communications options including Ethernet TCP/IP, reflective memory, Genius LAN, and serial communications modules that provide for precise solutions using off-the-shelf components.
- The Series 90-70 PLC is an ideal candidate for acting as your factory-floor server, collecting data and passing it on to the ERP.



	Catalog Number	Description	Catalog Number	Description
Simplex Controllers	IC697CPU731	CPU, 512 Discrete I/O, 32K Memory, 12MHz Processor, 1 serial port	IC697CPX928	CPU, 12K Discrete I/O, 6 Meg Memory, 96MHz Processor, 3 serial ports
	IC697CPX772	CPU, 2K Discrete I/O, 512K Memory, 96MHz Processor, 3 serial ports	IC697CPX935	CPU, 12K Discrete I/O, 1 Meg fast access Memory, 96MHz Processor, 3 serial ports
	IC697CPX782	CPU, 12K Discrete I/O, 1 Meg Memory, 96MHz Processor, 3 serial ports		
Hot Standby CPUs	IC697CGR772	CPU, 2K Discrete I/O, 512K Memory, 96MHz Processor, 3 serial ports	IC697CGR935	CPU, 12K Discrete I/O, 1Meg Memory, 96MHz Processor, 3 serial ports
Critical Control CPU	IC697CPM790	CPU, 2K Discrete I/O, 1 Meg Memory, 64MHz Processor. Triplex Voted I/O		
Racks	IC697CHS750	Rack, 5 Slots, Rear Mount	IC697CHS770	Redundant Rack (Dual) Rear Mount
	IC697CHS790	Rack, 9 Slots, Rear Mount	IC697CHS771	Redundant Rack (Dual) Front Mount
	IC697CHS791	Rack, 9 Slots, Front Mount	IC697CHS782	Integrators Rack, 17 Slots, Rear Mount
	IC697CHS790xSV	Rack, 9 Slots, Rear Mount Severe Vibration Rack	IC697CHS783	Integrators Rack, 17 Slots, Front Mount
Power Supplies	IC697PWR710	Power Supply, 120/240 VAC, 125VDC, 50 Watts	IC697PWR724	Power Supply, 24 VDC, 90 Watts
	IC697PWR711	Power Supply, 120/240 VAC,125VDC, 100 Watts	IC697PWR748	Power Supply, 48 VDC, 90 Watts
Discrete Inputs	IC697MDL240	120 VAC Isolated Input (16 Points)	IC697MDL640	125 VDC Input (16 Points)
	IC697MDL241	240 VAC Isolated Input (16 Points)	IC697MDL651	5 VDC (TTL) Input (32 Points)
	IC697MDL250	120 VAC Input (32 Points)	IC697MDL652	12 VDC Input, Positive/Negative Logic (32 Points)
	IC697MDL251	120 VAC Input (16 Points) Non-isolated	IC697MDL653	24 VDC Input, Positive/Negative Logic (32 Points)
	IC697MDL252	12 VAC Input (32 Points)	IC697MDL654	48 VDC Input, Positive/Negative Logic (32 Points)
	IC697MDL253	24 VAC Input (32 Points)	IC697MDL671	Interrupt Input Module, 14 points
	IC697MDL254	48 VAC Input (32 Points)	IC697VDD100	24VDC Source, 64 point, can be configured for SOE (Sequence Of Event) recording.
Discrete Outputs	IC697MDL340	120 VAC Output, 2 Amp (16 Points)	IC697MDL740	24/48 VDC Output, 2 Amp, Positive Logic (16 Points)
	IC697MDL341	120/240 VAC Isolated Output, 2 Amp (12 Points)	IC697MDL750	24/48 VDC Output, 0.5 Amp, Positive Logic (32 Points)
	IC697MDL350	120 VAC Output, 0.5 Amp (32 Points)	IC697MDL752	12 VDC Output, 0.5 Amp, Positive Logic (32 Points)
	IC697MDL940	Relay Output, Signal, 2 Amp (16 Points)	IC697MDL753	5/48 VDC Output, 0.5 Amp, Negative Logic (32 Points)
	IC697VDR150	Relay Output, 32 point, non latching, 2 amp.	IC697VDQ120	Digital Output, 64 point, 24VDC at 500 mA, Sink or Source, 64 point.
	IC697VDR151	Relay Output, 64 point, non latching.		
Analog Inputs	IC697ALG230	Voltage/Current, 8 Channels	IC697VAL216	0 to 5VDC, 0 to 10VDC, +/- 2.5VDC, +/- 5VDC, +/- 10VDC, 16 Channel, jumper selectable. 16bit Resolution.
	IC697ALG440	Analog Input Expander, Current, 16 Channels. Used with IC697ALG230.	IC697VAL232	0 to 5VDC, 0 to 10VDC, +/- 2.5VDC, +/- 5VDC, +/- 10VDC, 32 Channel, jumper selectable 16bit Resolution.
	IC697ALG441	Analog Input Expander, Voltage, 16 Channels. Used with IC697ALG230.	IC697VAL264	0 to 5VDC, 0 to 10VDC, +/- 2.5VDC, +/- 5VDC, +/- 10VDC, 64 Channel, jumper selectable 16bit Resolution.
	IC697VAL132	0 - 20ma, 12bit, 32 channel single ended or 16 channel differential	IC697VRD008	RTD/Strain Bridge Module. Supports 8 channels of 100 ohm platinum RTD or +/- 30mV and +/-100mV voltage inputs. 12bits plus sign.
	IC697VAL134	0 to 10VDC, +/-5VDC, +/- 10VDC, 32 channel single ended or 16 channel differential.		
Analog Outputs	IC697ALG320	Analog Output, Voltage/Current, 4 Channels	IC697VAL308	Analog Output, Isolated, 8 channel, 12 bit, Voltage - bipolar +/-2.5VDC, +/-5VDC, +/-10VDC
	IC697VAL301	Analog Output, 12 bit, 32 channel 0 - 10VDC, 0 - 5VDC,+/-2.5VDC, +/-5VDC, +/- 10VDC .	IC697VAL324	Analog Output, Isolated, 4 channel, 12 bit, Voltage - polar 0 - 10VDC, 0 - 5VDC.
	IC697VAL306	Analog Output, 12bit, 16 channel, non Isolated, Voltage/Current jumper selectable voltage 0 - 10VDC, 0 - 5VDC,+/-2.5VDC, +/-5VDC, +/-10VDC or Current 0 to 20mA, 4 to 20mA, and 5 to 25 mA.	IC697VAL314	Analog Output, Isolated, 4 channel, 12 bit, Current - 4 to 20 mA.
	IC697VAL328	Analog Output, Isolated, 8 channel, 12 bit, Voltage - polar 0 - 10VDC, 0 - 5VDC.	IC697VAL304	Analog Output, Isolated, 4 channel, 12 bit, Voltage - bipolar +/-2.5VDC, +/-5VDC, +/- 10VDC.
	IC697VAL318	Analog Output, Isolated, 8 channel, 12 bit, Current - 4 to 20 mA.	IC697VAL348	Analog Output, 8 channel, 16bit, Voltage bipolar 0 to +/-10VDC.
Communication Modules	IC697CMM711	Serial Communications Coprocessor, CCM, RTU, SNP, and SNPx Protocols	IC697VRM015	Reflective Memory with 256Kbyte memory and 512 transfer FIFO. 170 Mbaud fiber optic network. Supports up to 256 nodes over 2,000 meters.
	IC697CMM742	Ethernet Interface for Series 90-70, Type 2	IC697RCM711	Redundancy Communications Module (Hot Standby)
I/O Interface	IC697BEM711	Bus Receiver (Required for Each Local Expansion Rack)	IC697BEM733	Series 90-70 Genius Remote I/O Scanner
Modules	IC697BEM713	Bus Transmitter (Also Provides Parallel Programming Port)	IC697BEM761	Series 90-70 I/O Interface (Used with Series Six Plus PLC)
	IC697BEM731	Series 90-70 Genius I/O Bus Controller		
Special Function	IC697HSC700	High Speed Counter	IC697VSC096	Single Board Computer, 300 Mhz with 32Mbyte SDRAM and 96 Mbyte Flash
Modules	IC697PCM711	Programmable Coprocessor	IC697VHD001	10Gig Hard Drive for Single Board Computer (IC697VSC096)



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#### Additional Resources

For detailed technical specifications and product ordering information, please visit the GE Fanuc e-catalog at:





# PACSystems™ RX3i Controller

The new PACSystems™ RX3i controller is the latest addition to the innovative PACSystems family of programmable automation controllers (PACs). Like the rest of the family, the PACSystems RX3i features a single control engine and universal programming environment to provide application portability across multiple hardware platforms and deliver a true convergence of control choices. Using the same control engine as the PACSystems RX7i, the new PACSystems RX3i offers a high level of automation functionality in a compact, cost-effective package. The PACSystems portable control engine provides high performance on several different platforms, allowing OEMs and end users with application variability to choose the exact control system hardware that best suits their needs.

#### PACSystems RX3i Benefits:

The innovative technology of the PACSystems RX3i enables users to:

- Address major engineering and business issues, such as higher productivity and tighter cost control
- Boost the overall performance of their automation systems
- Reduce engineering and commissioning costs
- · Easily integrate new technology into installed base systems
- Significantly decrease concerns regarding shortand long-term migration and platform longevity

#### PACSystems RX3i Features:

- High-speed processor and patented technology for faster throughput without information bottlenecks
- Dual backplane bus support per module slot:
  - High-speed, PCI-based for fast throughput of new advanced I/O
  - Serial backplane for easy migration of existing Series 90-30 I/O
- Celeron 300 mHz CPU for advanced programming and performance with 10Mbytes memory
- Memory for ladder logic documentation and machine documentation (Word, Excel, PDF, CAD and other files) in the controller to reduce downtime and improve trouble shooting.
- Open communications support including Ethernet, GENIUS®, Profibus™, DeviceNet™ and serial
- Supports high density discrete I/O, universal analog (TC, RTD, Strain Gauge, Voltage and Current configurable per channel), isolated analog, high-density analog, high-speed counter, and motion modules

- Expanded I/O offering with extended features for faster processing, advanced diagnostics and a variety of configurable interrupts
- Hot insertion for both new and migrated modules
- Isolated 24VDC terminal for I/O modules and a grounding bar that reduces user wiring

#### Protecting Users' Installed Investment:

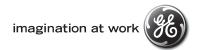
Like the rest of the PACSystems family, the PACSystems RX3i is designed for easy integration with installed hardware systems

- Seamless migration path for GE Fanuc customers
- Protection for each user's investment in both I/O and applications development
- Power for users of all control systems to leverage as much of their installed automation investment as possible

## Universal Development Environment:

The common software platform across all of GE Fanuc controllers, award-winning CIMPLICITY® Machine Edition™ software provides the universal engineering development environment for programming, configuration and diagnostics for the entire PACSystems family.

- Programming tools such as tag-based programming, a library of reusable code and a test edit mode for improved online troubleshooting
- User-friendly environment that can increase design flexibility and improve engineering efficiency and productivity



	Part Number	Description	Part Number	Description
Controllers	IC695CPU310*	300Mhz CPU, 10Mbytes of memory, two serial ports (requires 2 slots)		
Controller Bases	IC695CHS012	System Base, 12 Universal Slots	IC695CHS016	System Base, 16 Universal Slots
Expansion Bases	IC694CHS392	Base, Expansion, 10 Slots	IC694CHS399	Base, Remote Expansion, 5 Slots (700 ft.)
Controller Power Supplies	IC695PSA040*	Power Supply, AC, 40 Watts (requires 2 slots)	IC695PSD040*	Power Supply, 24VDC, 40 Watts (requires 1 slot)
Expansion Power Supplies	IC694PWR321	Power Supply, 120/240 VAC, 125 VDC, Standard, 30 Watts (Use with Expansion Base)	IC693ACC340	Redundant Power Supply Base (RPSB) with 0.1 meter cable to connect to Power Supply Adapter Module (Use with Expansion Base)
	IC694PWR330	Power Supply, 120/240 VAC, 125 VDC, High Capacity, 30 Watts (Use with Expansion Base)	IC693ACC341	Redundant Power Supply Base with 0.5 meter cable to connect to Power Supply Adapter Module (Use with Expansion Base)
	IC694PWR331	Power Supply, 24 VDC, High Capacity, 30 Watts (Use with Expansion Base)	IC693ACC350	Redundant Power Supply Adapter (RPSA) Module. The RPSA replaces the power supply on a CPU base or expansion base and connects to a Redundant Power Supply Base. (Use with Expansion Base)
Discrete Input Modules	IC694MDL230	120 VAC Isolated Input (8 Points)	IC694MDL645	24 VDC Input, Neg/Pos Logic (16 Points)
	IC694MDL231	240 VAC Isolated Input (8 Points)	IC694MDL646	24 VDC Input, Neg/Pos Logic, 1 msec Filter (16 Points)
	IC694MDL240	120 VAC Input (16 Points)	IC694MDL654	5/12 VDC (TTL) Input, Neg/Pos Logic, (32 Points)
	IC694MDL241	24 VAC/VDC Input (16 Points)	IC694MDL655	24 VDC Input, Neg/Pos Logic, 1 ms, (32 Points)
	IC694MDL260	120 VAC Input (32 Points)**	IC694MDL660	24 VDC Input (32 Points)**
	IC694MDL632	125 VDC Input (8 Points)	IC694ACC300	Input Simulator Module (8 Points)
	IC694MDL634	24 VDC Input, Neg/Pos Logic (8 Points)		
Discrete Output Modules	IC694MDL310	120 VAC Output, 0.5 Amp (12 Points)	IC694MDL740	12/24 VDC Output, 0.5 Amp, Positive Logic (16 Points)
	IC694MDL330	120/240 VAC Output, 2 Amp (8 Points)	IC694MDL741	12/24 VDC Output, 0.5 Amp, Negative Logic (16 Points)
	IC694MDL340	120 VAC Output, 0.5 Amp (16 Points)	IC694MDL742	12/24 VDC Output, 1 Amp, Positive Logic (16 Points), Fused
	IC694MDL390	120/240 VAC Isolated Output, 2 Amp (5 Points)	IC694MDL752	5/12/24 VDC (TTL) Output, Negative Logic, (32 Points)
	IC694MDL730	12/24 VDC Output, 2 Amp, Positive Logic (8 Points)	IC694MDL753	12/24 VDC Output, Positive Logic (32 Points)
	IC694MDL732	12/24 VDC Output, 0.5 Amp, Positive Logic (8 Points)	IC694MDL754	24 VDC Output w/ ESCP, 0.75 Amp (32 Points)**
	IC694MDL734	125 VDC Output (6 Points)		
Relay Output Modules	IC694MDL916	Relay Output, Isolated, 4 Amp (16 Points)**	IC694MDL931	Relay Output, 8 Amp Form B/C contacts, Isolated in 2 Groups of 4 (8 Points)
	IC694MDL924	Relay Output, 2 Amp (24 Points)**	IC694MDL940	Relay Output, 2 Amp (16 Points)
	IC694MDL930	Relay Output, Isolated, 4 Amp (8 Points)		
Analog Input Modules	IC694ALG220	Analog Input, Voltage/Current, 4 Channels		
	IC694ALG221	Analog Input, Current, 4 Channels	IC695ALG240*	Analog Input, Isolated, Voltage/Current, 12 Channels**
	IC694ALG222	Analog Input, Voltage 16 Single/8 Differential Channels	IC695ALG600**	Analog Input, Universal, Voltage/Current/RTD/TC/Strain Gauge, 8 Channels*
	IC694ALG223	Analog Input, Current, 16 Single Channels		
Analog Output Modules	IC695ALG331*	Analog Output, Isolated, Voltage/Current (12 Channels)**	IC694ALG392	High Density Analog Output (8 Channels)
	IC694ALG390	Analog Output, Voltage (2 Channels)		
	IC694ALG391	Analog Output, Current (2 Channels)		
Mixed Analog Modules	IC694ALG442	Analog Combo Module (4IN/20UT)		
Motion Modules	IC694APU300	High Speed Counter (HSC)	IC694DSM314	Digital Servo Motion Controller, 1-2 Axis of Digital Servo or 1-4 Axis Analog Servo
	IC694APU305	High Speed Counter with Gray Code Encoder or an A QUAD B Encoder Input		
Communications Modules	IC694BEM331	Genius Bus Controller (Supports I/O and Datagrams)	IC695ETM001*	Ethernet Module, 10/100 base T/TX ports (requires 1 slot)
	IC695PBM001*	Profibus Master Module	IC693NIU004	Ethernet Remote I/O Interface for IC694CHSxxx Expansion Racks
	IC695PBS001*	Profibus Slave Module		
Expansion Modules	IC695LRE001*	Local Expansion Module (requires no universal slots)		
Terminal Blocks	IC694TBB032	High Density Terminal Block Box Style (36 Terminals)	IC694TBS032	High Density Terminal Block Spring Style (36 Terminals)
Accessories	IC693ACC302	High Capacity Battery Pack (mounts externally)	IC693CBL312	Rack to Rack Expansion Cable, 0.15 Meters, Shielded
	IC693CBL300	Rack to Rack Expansion Cable, 1 Meter	IC693CBL313	Rack to Rack Expansion Cable, 8 Meters
	IC693CBL301	Rack to Rack Expansion Cable, 2 Meters	IC693CBL314	Rack to Rack Expansion Cable, 15 Meters, Shielded
	IC693CBL302	Rack to Rack Expansion Cable, 15 Meters	IC694ACC310	Blank Filler Module
Programming and Troubleshooting Tools	IC646MPP001	Logic Developer - PLC Professional	IC646MPH101	Logic Developer PDA Software Tool with Cable Adapter
Programming and	IC693CBL300 IC693CBL301 IC693CBL302	Rack to Rack Expansion Cable, 1 Meter Rack to Rack Expansion Cable, 2 Meters Rack to Rack Expansion Cable, 15 Meters	IC693CBL313 IC693CBL314 IC694ACC310	Rack to Rack Expansion Cable, 8 Meters Rack to Rack Expansion Cable, 15 Meters, Shielded Blank Filler Module

Availability varies per module, please check with your GE Fanuc representative for release dates and availability.

 ${\it See publication GFA-558 \ for \ additional \ technical \ information}.$ 



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#### **Additional Resources**

For detailed technical specifications and product ordering information, please visit the GE Fanuc website at:

<sup>\*</sup>Compatible with IC695CHS 012/016 base only.

<sup>\*\*</sup>Requires either Box Style (IC694TBB032) or Spring Clamp (IC694TBS032) high density terminal block.





# PACSystems™RX7i Controller

Built on a standard embedded open architecture, the new PACSystems RX7i is the first member of the ground-breaking PACSystems family of programmable automation controllers (PACs). Like the rest of the family, the PACSystems RX7i features a single control engine and universal programming environment to provide application portability across multiple hardware platforms, creating a seamless migration path for GE Fanuc customers and delivering a true convergence of control choices. Designed to address mid- to high-end applications for OEMs, integrators, and end users, the RX7i is ideally suited for integrated solutions that require open architecture, large memory, distributed I/O, and high performance. The PACSystems RX7i system addresses your major business issues (performance, productivity, openness, flexibility and migration) to help you improve your overall profitability.

#### Performance – Delivering on the Demands of Your Most Advanced Applications

- Pentium® III CPUs (300mHz and 700mHz)
- VME64 Backplane provides up to four times the bandwidth of existing Series 90™-70 systems
- 10/100 Ethernet built into the CPU, with easy cabling RJ-45 dual ports connected through an auto-sensing switch — no need for additional switches or hubs rack to rack
- 10MB memory for fast execution, storage of the complete program with all documentation (including Excel, Word, PDF and DXF files) all in one CPU
- Powerful instruction set supports user-defined function blocks for high speed algorithms (C programming)
- High capacity power supplies (100W and 350W) to reduce the requirement for an external supply

# Productivity – Maximizing Efficiency of Design and Operation

- One common environment for configuring, programming, commissioning, and maintaining your application with CIMPLICITY® Machine Edition
- One tool for Control, View and Motion program development
- System Management with Manager provides Version Control, Security Access, and Audit Trail

#### Openness – Optimizing the Benefits of Market Technology

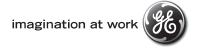
- Supports VME third party boards
- Connectivity to globally accepted communications:
   Ethernet, GENIUS®, Profibus™ and DeviceNet™
- Additional communications options with RS-232 and RS-485 ports
- Web server access with user-defined pages

#### Flexibility – Leveraging Software and Hardware Platforms for Multiple Generations

- Applications based on IEC 61131 international standards
- Mix languages within the application
- Supports existing Series 90-70 I/O and new I/O in same rack
- Scalability for future generations

#### Migration – Protecting Intellectual Property and Application Investment

- Same overall controller footprint
- Supports existing Series 90-70 modules, expansion racks, VME modules and GENIUS networks — protecting your hardware investment
- Seamless conversion of Series 90-70 programs for complete protection of application investment



	Part Number	Description	Part Number	Description
Controllers	IC698CPE010	RX7i VME 300Mhz CPU with Embedded 10/100 Ethernet	IC698CPE020	RX7i VME 700Mhz CPU with Embedded 10/100 Ethernet
Controller Racks	IC698CHS017	RX7i 17 VME Slot Rack, Rear Mount	IC698CHS117	RX7i 17 VME Slot Rack, Front Mount
Controller Power Supplies	IC698PSA100	RX7i PLC Power Supply, 85 to 264 VAC at 47 to 63 Hz Input, 100 Watt output	IC698PSA350	RX7i PLC Power Supply, 85 to 264 VAC at 47 to 63 Hz Input, 350 Watt output
Expansion Racks	IC697CHS750	Rack, 5 Slots, Rear Mount	IC697CHS782	Integrators Rack, 17 Slots, Rear Mount
	IC697CHS790	Rack, 9 Slots, Rear Mount	IC697CHS783	Integrators Rack, 17 Slots, Front Mount
	IC697CHS791	Rack, 9 Slots, Front Mount		
Expansion Power	IC697PWR710	Power Supply, 120/240 VAC, 125VDC, 50 Watts	IC697PWR724	Power Supply, 24 VDC, 90 Watts
Supplies	IC697PWR711	Power Supply, 120/240 VAC,125VDC, 100 Watts	IC697PWR748	Power Supply, 48 VDC, 90 Watts
Discrete Inputs	IC697MDL240	120 VAC Isolated Input (16 Points)	IC697MDL640	125 VDC Input (16 Points)
	IC697MDL241	240 VAC Isolated Input (16 Points)	IC697MDL651	5 VDC (TTL) Input (32 Points)
	IC697MDL250	120 VAC Input (32 Points)	IC697MDL652	12 VDC Input, Positive/Negative Logic (32 Points)
	IC697MDL251	120 VAC Input (16 Points) Non-isolated	IC697MDL653	24 VDC Input, Positive/Negative Logic (32 Points)
	IC697MDL252	12 VAC Input (32 Points)	IC697MDL654	48 VDC Input, Positive/Negative Logic (32 Points)
	IC697MDL253	24 VAC Input (32 Points)	IC697MDL671	Interrupt Input Module, 14 points
	IC697MDL254	48 VAC Input (32 Points)	IC697VDD100	24VDC Source, 64 point, can be configured for SOE (Sequence Of Event) recording.
Discrete Outputs	IC697MDL340	120 VAC Output, 2 Amp (16 Points)	IC697MDL740	24/48 VDC Output, 2 Amp, Positive Logic (16 Points)
	IC697MDL341	120/240 VAC Isolated Output, 2 Amp (12 Points)	IC697MDL750	24/48 VDC Output, 0.5 Amp, Positive Logic (32 Points)
	IC697MDL350	120 VAC Output, 0.5 Amp (32 Points)	IC697MDL752	12 VDC Output, 0.5 Amp, Positive Logic (32 Points)
	IC697MDL940	Relay Output, Signal, 2 Amp (16 Points)	IC697MDL753	5/48 VDC Output, 0.5 Amp, Negative Logic (32 Points)
	IC697VDR150	Relay Output, Non-latching, 2 Amp (32 point)	IC697VDQ120	Digital Output, 64 point, 24VDC at 500 mA, Sink or Source (64 point)
	IC697VDR151	Relay Output, Non-latching (64 Points)		
Analog Inputs	IC697ALG230	Voltage/Current, 8 Channels	IC697VAL216	0 to 5VDC, 0 to 10VDC, +/- 2.5VDC, +/- 5VDC, +/- 10VDC, 16 Channel, Jumper Selectable 16-bit Resolution
	IC697ALG440	Analog Input Expander, Current, 16 Channels. Used with IC697ALG230.	IC697VAL232	0 to 5VDC, 0 to 10VDC, +/- 2.5VDC, +/- 5VDC, +/- 10VDC, 32 Channel, Jumper Selectable 16-bit Resolution
	IC697ALG441	Analog Input Expander, Voltage, 16 Channels. Used with IC697ALG230.	IC697VAL264	0 to 5VDC, 0 to 10VDC, +/- 2.5VDC, +/- 5VDC, +/- 10VDC, 64 Channel, Jumper Selectable 16-bit Resolution
	IC697VAL132	0 - 20ma, 12-bit, 32 Channel Single Ended or 16 Channel Differential	IC697VRD008	RTD/Strain Bridge Module. Supports 8 channels of 100 ohm platinum RTD or +/- 30mV and +/-100mV voltage inputs. 12 bits plus sign.
	IC697VAL134	0 to 10VDC, +/-5VDC, +/- 10VDC, 32 Channel Single Ended or 16 Channel Differential		
Analog Outputs	IC697ALG320	Analog Output, Voltage/Current, 4 Channels	IC697VAL308	Analog Output, Isolated, 8 channel, 12 bit, Voltage - bipolar +/-2.5VDC, +/-5VDC, +/- 10VDC
	IC697VAL301	Analog Output, 12 bit, 32 channel 0 - 10VDC, 0 - 5VDC,+/-2.5VDC, +/-5VDC, +/- 10VDC	IC697VAL324	Analog Output, Isolated, 4 channel, 12 bit, Voltage - polar 0 - 10VDC, 0 - 5VDC
	IC697VAL306	Analog Output, 12bit, 16 channel, non Isolated, Voltage/Current jumper selectable voltage 0 - 10VDC, 0 - 5VDC,+/-2.5VDC, +/-5VDC, +/- 10VDC or Current 0 to 20mA, 4 to 20mA, and 5 to 25 mA.	IC697VAL314	Analog Output, Isolated, 4 channel, 12 bit, Current - 4 to 20 mA.
	IC697VAL328	Analog Output, Isolated, 8 channel, 12 bit, Voltage - polar 0 - 10VDC, 0 - 5VDC	IC697VAL304	Analog Output, Isolated, 4 channel, 12 bit, Voltage - bipolar +/-2.5VDC, +/-5VDC, +/- 10VDC
	IC697VAL318	Analog Output, Isolated, 8 channel, 12 bit, Current - 4 to 20 mA	IC697VAL348	Analog Output, 8 channel, 16bit, Voltage bipolar 0 to +/-10VDC
Communication Modules	IC698ETM001	RX7i Ethernet Module 10/100, Auto Sensing, Auto Switching	IC697VRM015	Reflective Memory with 256Kbyte memory and 512 transfer FIFO. 170 Mbaud fiber optic network. Supports up to 256 nodes over 2,000 meters.
	IC697CMM711	Serial Communications Coprocessor, CCM, RTU, SNP, and SNPx Protocols	IC697RCM711	Redundancy Communications Module (Hot Standby)
I/O Interface Modules	IC697BEM711	Bus Receiver (Required for Each Local Expansion Rack)	IC697BEM731	Series 90-70 Genius I/O Bus Controller
	IC697BEM713	Bus Transmitter	IC697BEM733	Series 90-70 Genius Remote I/O Scanner
Special Function Modules	IC697HSC700	High Speed Counter	IC697PCM711	Programmable Coprocessor
Accessories	IC698ACC701	Lithium Battery pack		



#### **GE Fanuc Automation Information Centers**

USA and the Americas: 1-800-GE FANUC or (434) 978-5100

Europe, Middle East and Africa: (352) 727979-1

Asia Pacific: 86-21-3222-4555

#### **Additional Resources**

For detailed technical specifications and product ordering information, please visit the GE Fanuc website at: