Series 90-70 PLC

With superior performance, power, and flexibility, GE Intelligent Platforms' Series 90*-70 PLC provides a comprehensive solution that can address your 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 it provides increased flexibility for a variety of applications due to a wide range of isolated and high-density VME analog I/O modules.

Open Architecture

Based on the VME-bus standard, the Series 90-70 can be used with thousands of boards produced by hundreds of different manufacturers to build a solution that meets your exact needs. These include links to drives and drive systems, servo motor controllers, embedded solutions for vision systems and bus-to-bus interface modules, as well as a variety of modules available from GE (see accompanying table).

Various Degrees of Redundancy

Combining the Series 90-70 with the advanced functionality of Genius* I/O, GE Genius Modular Redundancy (GMR) systems and Hot Standby systems can provide as much or as little redundancy as you need for your critical applications.

- The versatility and strength of the GMR system make it an ideal choice for rigorous emergency shutdown and human life protection systems. It has a class 6 TÜV rating.
- Based on three isolated PLCs and extensive diagnostics, the GMR triple modular redundancy system uses two-out-of-three voting to provide high reliability and error-free 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.

Flexible Communications Options

The Series 90-70 offers a wide variety of communications options, including Ethernet TCP/IP, reflective memory, Genius LAN, and serial communications modules that enable precise solutions using off-the-shelf components. It is an ideal candidate for acting as your factory-floor server, collecting data and seamlessly integrating it with the ERP system.

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Ordering Information

	Catalog Number	Description	Catalog Number	Description
Simplex Controllers	IC697CPU731	CPU, 512 Discrete I/O, 32K Memory, 12 MHz Processor, 1 serial port	IC697CPX928	CPU, 12K Discrete I/O, 6 Meg Memory, 96 MHz Processor, 3 serial ports
	IC697CPX772	CPU, 2K Discrete I/O, 512K Memory, 96 MHz Processor, 3 serial ports	IC697CPX935	CPU, 12K Discrete I/O, 1 Meg fast access Memory, 96 MHz Processor, 3 serial ports
	IC697CPX782	CPU, 12K Discrete I/O, 1 Meg Memory, 96 MHz Processor, 3 serial ports		
Hot Standby CPUs	IC697CGR772	CPU, 2K Discrete I/O, 512K Memory, 96 MHz Processor, 3 serial ports	IC697CGR935	CPU, 12K Discrete I/O, 1Meg Memory, 96 MHz Processor, 3 serial ports
Critical Control CPU	IC697CPM790	CPU, 2K Discrete I/O, 1 Meg Memory, 64 MHz 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	24 VDC 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 5 VDC, 0 to 10 VDC, ±2.5 VDC, ±5 VDC, ± 10 VDC, 16 Channel, jumper selectable, 16 bit Resolution
	IC697ALG440	Analog Input Expander, Current, 16 Channels. Used with IC697ALG230.	IC697VAL232	0 to 5 VDC, 0 to 10 VDC, ± 2.5 VDC, ± 5VDC, ± 10 VDC, 32 Channel, jumper selectable 16 bit Resolution.
	IC697ALG441	Analog Input Expander, Voltage, 16 Channels. Used with IC697ALG230.	IC697VAL264	0 to 5 VDC, 0 to 10 VDC, ± 2.5 VDC, ± 5 VDC, ± 10 VDC, 64 Channel, jumper selectable 16 bit Resolution.
	IC697VAL132	0 - 20 ma, 12 bit, 32 channel single ended or 16 channel differential	IC697VRD008	RTD/Strain Bridge Module. Supports 8 channels of 100 ohm platinum RTD or ± 30 mV and ±100 mV voltage inputs. 12 bits plus sign.
	IC697VAL134	0 to 10 VDC, ±5 VDC, ± 10 VDC, 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 ±2.5 VDC, ±5 VDC ± 10 VDC.
	IC697VAL301	Analog Output, 12 bit, 32 channel 0 - 10 VDC, 0 - 5 VDC, ±2.5 VDC, ±5 VDC, ± 10 VDC	IC697VAL324	Analog Output, Isolated, 4 channel, 12 bit, Voltage - polar 0 - 10 VDC, 0 - 5 VDC
	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 - 10 VDC, 0 - 5 VDC	IC697VAL304	Analog Output, Isolated, 4 channel, 12 bit, Voltage - bipolar ±2.5 VDC, ±5 VDC, ± 10 VDC
	IC697VAL318	Analog Output, Isolated, 8 channel, 12 bit, Current - 4 to 20 mA.	IC697VAL348	Analog Output, 8 channel, 16 bit, Voltage bipolar 0 to ±10 VDC
Communication Modules	IC697CMM711	Serial Communications Coprocessor, CCM, RTU, SNP, and SNPx Protocols	IC697VRM015	Reflective Memory with 256 Kbyte 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 Modules	IC697BEM711	Bus Receiver (Required for Each Local Expansion Rack)	IC697BEM733	Series 90-70 Genius Remote I/O Scanner
	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 Modules	IC697HSC700	High Speed Counter	IC697VSC096	Single Board Computer, 300 MHz with 32 Mbyte SDRAM and 96 Mbyte Flash
	IC697PCM711	Programmable Coprocessor	IC697VHD001	10 Gig Hard Drive for Single Board Computer (IC697VSC096)