CPUs

The high-performance CPU is based on the latest technology processor with fast computation and high throughput. The controller can manage up to 32K of I/O in a number of standard languages. The powerful CPU enables complex applications to be easily solved with the high performance processor and up to 64 Mbytes of user memory. The RX3i supports multiple IEC languages and C programming to give you program flexibility. The RX3i increases machine cycle times, reduces downtime with its extensive diagnostics and hot swap capability, and enables you to store large amounts of data to reduce external hardware cost.

	IC695CPE310	IC695CPU320	IC695CPU315
Product Name	RX3i CPU with built-in USB Master port, Ethernet port and 2 serial ports	RX3i CPU with two built-in serial ports	RX3i CPU with two built-in serial ports
Lifecycle Status	Active	Mature w/ replacement	Mature w/ replacement
Module Type	Controller	Controller	Controller
Backplane Support	Universal Backplane Only. Uses PCI Bus.	Universal Backplane Only. Uses PCI Bus.	Universal Backplane Only. Uses PCI Bus.
Boolean Execution Speed (ms/K)	.072	0.047	0.047
User Logic Memory	10Meg bytes	64Mega bytes	20Meg bytes
Battery Backed Real Time Clock	Yes	Yes	Yes
Dynamic Data Back-up	Energy Pack Support (Battery-less Backup)	Battery Backup only	Battery Backup only
I/O Discrete Points	32K	32K	32K
I/O Analog Points	32K	32K	32K
Type of Memory Storage	SRAM, Flash	SRAM, Flash	SRAM, Flash
Processor Speed (MHz)	1.1GHz	1GHz	1GHz
USB -A 2.0 Master Port	Yes. CPU application upload/download to a Thumb Drive or Smart Phone	No	No
Built-in Ethernet Ports	One RJ-45 port, 10/100Mbaud. SRTP support for programmer only		
Built-in Serial Ports	One RS-485 port and one RS-232 port. Supports SNP, Serial I/O, Modbus Slave and Modbus Master (Application code)	One RS-485 port and one RS-232 port. Supports SNP, Serial I/O, Modbus Slave and Modbus Master (Application code)	One RS-485 port and one RS-232 port. Supports SNP, Serial I/O, Modbus Slave and Modbus Master (Application code)
Total Number of Local Racks	8	8	8
Communications Options	Serial, Genius, CMX (Reflective Memory), Ethernet	Serial, Genius, CMX (Reflective Memory), Ethernet	Serial, Genius, CMX (Reflective Memory), Ethernet
Supported IO Protocols	Ethernet (PROFINET, Ethernet Global Data, Channels, Modbus TCP Server and Client), Genius, PROFIBUS DP, DeviceNet	Ethernet (PROFINET, Ethernet Global Data, Channels, Modbus TCP Server and Client), Genius, PROFIBUS DP, DeviceNet	Ethernet (PROFINET, Ethernet Global Data, Channels, Modbus TCP Server and Client), Genius, PROFIBUS DP, DeviceNet
Software Programming Support	Machine Edition Logic Developer Professional edition 7.0 SIM 3 or above	Machine Edition Logic Developer Professional edition 5.6 or above	Machine Edition Logic Developer Professional edition 5.6 or above
Program Languages Supported	Ladder Logic, Structured Text, C, Function Block Diagram	Ladder Logic, Structured Text, C, Function Block Diagram	Ladder Logic, Structured Text, C, Function Block Diagram
Internal Power Used	+3.3 VDC: 1.0 A +5 VDC: 1.0 A (up to 1.5 A if USB is fully loaded with 0.5 A) +24 VDC: 0.5A at startup, 0.1 A during run time (Applies only if Energy Pack is connected to the CPE305.)	1750 mA @ 3.3 VDC; 1200 mA @ 5 VDC	1750 mA @ 3.3VDC; 1200 mA @ 5VDC (Check Data sheet)
Number of Slots Module Occupies on Backplane	2	2	2
HART Pass-through	HART Pass-through – Fully integrated into the PLC system over a monitored communications network, you can simply and securely access HART instruments directly to remotely manage and mitigate operational issues with no additional equipment required.		