GE RX3i PacSystem Series Service Manual

IC695CPE330

1. Description

The GE Fanuc / Emerson Automation IC695CPE330 is a PACSystem RX3i controller. This controller has 64MB RAM and 64MB non-volatile user memory, processor speed of 1 GHz. This controller has Two (2) independent 10/100/1000 Gbps Ethernet ports and One (1) USB master port with embedded switch provided by LAN 2 connections. This controller supports hot-standby configuration with PROFINET controllers, Ethernet (EGD) & Genius IO.

2. Specifications

Specification	Value
Brand	**GE Fanuc / Emerson Automation**
Series	**RX3i PacSystem**
Part	**Number IC695CPE330**
Product	**Type CPU module**
Processor	**Clock Speed 1.0 Ghz**
RAM	**64 MB**
NVRAM	**64MB**
I/O	**Points up to 32 K I/O**
Ethernet	**Ports Three (3); Single port LAN 1; Dual Port LAN 2 with embedded switch**
Controller	**Redundancy Supported**
Maximum	**Program Blocks 512**
Maximum	**Block Size 128 kilobytes**
Operating	**Temperature 0 to 60 degrees Celsius**
Energy	**Pack IC695ACC402**
Product	**Description RX3i CPU**
Number	**of Slots 2**
Number	**of Local Racks 8**
I/O	**Points 32K, discrete and analog**
Program	**Storage 64 Mbytes of User Memory**
Type	**of Memory Storage ICFast, Compactflash**
Processor	**Speed 1.6G Hertz Dual Core**
Power	**Requirement 0.0 Amps at +5 and +3.3 Volts DC, 0.625 Amps at +24 Volts DC**
Serial	**Ports None**
Ethernet	**Port RJ-45, 10/100/1000Mbaud**
Protocol	**Support Modbus RTU/TCP, DeviceNet, PROFIBUS, PROFINET**
Backplane	**Universal backplane**
The	**IC695CPE330 is a GE Fanuc / Emerson Automation controller that is part of the PACSystem RX3i automation platform**

3. Product Information

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Technical specifications for IC695CPE330

Brand GE Fanuc / Emerson Automation

Series RX3i PacSystem

Part Number IC695CPE330

Product Type CPU module

Processor Clock Speed 1.0 Ghz

RAM 64 MB

NVRAM 64MB

I/O Points up to 32 K I/O

Ethernet Ports Three (3); Single port LAN 1; Dual Port LAN 2 with embedded switch

Controller Redundancy Supported

Maximum Program Blocks 512

Maximum Block Size 128 kilobytes

Operating Temperature 0 to 60 degrees Celsius

Energy Pack IC695ACC402

Product Description RX3i CPU

Number of Slots 2

Number of Local Racks 8

I/O Points 32K, discrete and analog

Program Storage 64 Mbytes of User Memory

Type of Memory Storage ICFast, Compactflash

Processor Speed 1.6G Hertz Dual Core

Power Requirement 0.0 Amps at +5 and +3.3 Volts DC, 0.625 Amps at +24 Volts DC

Serial Ports None

Ethernet Port RJ-45, 10/100/1000Mbaud

Protocol Support Modbus RTU/TCP, DeviceNet, PROFIBUS, PROFINET

Backplane Universal backplane

The IC695CPE330 is a GE Fanuc / Emerson Automation controller that is part of the PACSystem RX3i automation platform. This product is a controller module that is categorized as Programmable Automation Controller (PAC) that has a variety of enhancement and significant features that fits today’s application requirement and emerging technologies. This includes modern redundant fatures which may be implemented via PROFINET controllers, Ethernet (EGD) & Genius IO as well as a large amount of user memory amounting to 64 MB and 64 MB non-volatile memory. This controller is also fitted with modern microprocessor with 1GHz processing speed. This controller also supports gigabit as it may be connected in Ethernet network with transmission speed of 10 / 100 Mbps and 1Gbps communication rate.

The embedded Ethernet communication ports allow implementation of controller and media redundany for high-availability of I/O modules. These ethernet ports have dedicated microprocessor core, permitting the IC695CPE330 controller to implement up to 48 simultaneous SRTP Server connections, 16 simultaneous Modbus®/TCP Server connections with 32 clients are permitted for each connection which can be SRTP or Modbux/SRTP.

Additionally, the USB 2.0 Master port permits uploading and downloading of program using a generic thumb drive and smart phones. This feature is a convenient option for maintaining the operation of the RX3i control system.

The IC695CPE330 supports programming languages such Ladder Diagram (LD), Structured Text (ST), Function Block Diagram (FBD), or C Language. It also supports communicating with 3rd party devices via OPC UA, which is an industry known standard that can be implemented over Ethernet IP connection.

The IC695CPE330 CPU also supports a wide variety of IO protocols such as the PROFINET, EGD, Modbus TCP, PROFIBUS, Genius, DeviceNet, Modbus RTU, and Reflective Memory (CMX) protocols. It belongs to the RX3i family of CPUs and it comes with an embedded Ethernet/PROFINET interface. The IC695CPE330 RX3i PacSystems CPU also supports the rack-mounted PROFINET controller modules for communication. The IC695ACC402 energy pack, the IC695ACC412 capacitor pack, and the IC695CBL002 connecting cables are some of the optional accessories that can be used with this module. The faceplate of the module consists of 6 status LEDs, pushbuttons, and a 3-position run mode switch for easy monitoring and operation. This CPU must be installed in the main rack of the RX3i PLC system to integrate with any RX3i I/O module or intelligence option modules. It supports up to 32K discrete and analog I/O points. The IC695CPE330 RX3i CPU is the best choice for multi-tier communication and for processing a large amount of data in complex industrial applications.