

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

GE PACSYSTEMS RX3i

IC695ACC400-AA

CPU ENERGY PACK

Used with the applicable PACSystems RX3i energy packs configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: GE official manufacturer documentation

Warnings and Caution Notes as Used in this Publication

WARNING

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use.

In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

CAUTION

Caution notices are used where equipment might be damaged if care is not taken.

Note: Notes merely call attention to information that is especially significant to understanding and operating the equipment.

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Section 1: Introduction

This manual contains general information about PACSystems CPU operation and product features.

Section 1 provides a **general introduction** to the PACSystems family of products, including new features, product overviews, and a list of related documentation.

CPU Features & Specifications are provided in Section 2:.

Installation procedures for the different platforms are described in their respective manuals as given below:

1. *PACSystems RX7i Installation Manual*, GFK-2223.
2. *PACSystems RX3i System Manual*, GFK-2314.
3. *RSTi-EP User Manual*, GFK-2958.

CPU Programming is covered in *PACSystems RX3i and RSTi-EP CPU Programmer's Reference Manual*, GFK-2950. It provides an overview of program structure and describes the various languages which may be used, their syntax and operation, and provides examples.

CPU Configuration is described in Section 3:.. Configuration using the proprietary PAC Machine Edition™ (PME) programming and configuration software package determines characteristics of CPU, System and module operation. It also establishes the program references used by each module in the system. For details on configuration of RX3i Ethernet Interface modules, refer to *PACSystems RX3i and RSTi-EP TCP/IP Ethernet Communications User Manual*, GFK-2224.

CPU Operation is described in Section 4:..

Ethernet Communications and Serial Communications are described in Section 5:..

Serial I/O, SNP & RTU Protocols are described in Section 6:..

Performance Data, including Instruction Timing, is provided in Appendix.A:..

User Memory Allocation is described in A-1.20.

2.2 RX3i CPU Features and Specifications

	CPU310	CPU315	CPU320/ CRU320 ²⁰	CPE302 ²¹ / CPE305	CPE310	CPE330	CPE400/ CPL410
Lifecycle Phase	Discontinued - use CPE310	Discontinued - use CPE310 or CPE330	Discontinued - use CPE330	Active	Active	Active	Active
Operating System	VxWorks	VxWorks	VxWorks	VxWorks	VxWorks	VxWorks	VxWorks
#RX3i Slots Occupied	2	2	2	1	2	2	N/A
Backplane	<-----Supports High-Speed PCI IC695* and Serial IC694* Modules ----->						Field Agent (CPE400) / Linux (CPL410)
Temperature Range							
RX3i	0°C to 60°C	0°C to 60°C	0°C to 60°C	0°C to 60°C ²²	0°C to 60°C ¹⁵	0°C to 60°C	-40°C to 70°C ²³
Power Requirements							
RX3i +3.3Vdc	1.25 A	1.0 A	1.0 A	1.0 A	1.0 A	0 A	N/A
RX3i +5 Vdc	1.0 A	1.2 A	1.2 A	1.0 A (up to 1.5 A if USB draws 0.5A)	1.0 A (up to 1.5 A if USB draws 0.5A)	0 A	N/A
RX3i +24Vdc Relay with Energy Pack				0.5 A at start-up; 0.1 A otherwise	0.5 A at start-up; 0.1 A otherwise	0.750 A	N/A
RX3i +24Vdc Relay w/o Energy Pack						0.625 A	N/A
Input Power (Max)							20 W
Input Voltage (Min)							18 Vdc
Input Voltage (Max)							30 Vdc
Memory Backup Mechanism ²⁴	Battery see GFK-2741	Battery see GFK-2741	Battery see GFK-2741	Energy Pack: IC695ACC400	Energy Pack: IC695ACC400	Energy Pack: IC695ACC402	Energy Pack: IC695ACC403
Display							
	LEDs	LEDs	LEDs	LEDs	LEDs	LEDs	LEDs & OLED

²⁰ For CRU-type CPUs, see Redundancy section at bottom of this table.

²¹ Where different, CPE302 value is shown in parentheses (). Also note that first Firmware Version of CPE302 was FW 9.40.

²² LT versions of the hardware are rated from -40°C to 60°C.

²³ The maximum operating temperature varies according to installation altitude: 70 °C at 0m to 2000m, 65 °C at 2000m to 3000m, and 60 °C at 3000m to 4000m.

²⁴ See Battery Compatibility and Memory Retention (Time in Days at 20°C) in GFK-2741