

PACSystems* RX3i CPUs

Industrial Internet Ready

Equipment builders are continuously looking for ways to improve the performance and flexibility of their equipment while reducing size and complexity. Fast, easy-to-configure connectivity to Emerson's PACSystems controllers and extensive range of I/O options enable scalable machine automation and highly distributed modular machine designs. The end result is high performance automation for the industrial internet.

High Performance

Analyze and improve even the most complex application right at the source. The latest RX3i CPUs now offer multiple processing cores, allowing you to do more with your CPUs. A large working memory in every high speed RX3i CPU lets you store more data and access it faster than ever before. The RX3i offers premier high speed performance and data handling across any multi-disciplined control system. Whether you're accessing consistent gigabit data across the backplane or over fiber, kilometers away, the RX3i CPUs are built for rapid, reliable performance.

PROFINET Advantage

PROFINET I/O solutions can provide productivity and performance advantages for virtually any type of control application in a range of industries. PROFINET supports a variety of I/O without compromising system performance and can operate in high-noise environments. Connect to any of Emerson's purpose-built I/O families through a PROFINET interface for advanced flexibility and performance.

Best Availability

Can your process controller keep up with system demands? Many of today's controllers take ten milliseconds or more to switchover in the event of a fault or other system event. Often controllers are also limited in real I/O connections due to bottlenecks in overall data collection. Eliminate delays by combining RX3i and PROFINET to get Gigabit speed everywhere and bumpless (0 ms) switchover. Choose RX3i High Availability



and prevent unexpected failure and costly downtime.

- Simple configuration, maintenance and operation
- Single point of connect no matter what distance
- Fewer external devices to purchase and configure, and fewer spare parts to maintain
- High-speed communication for real-time control
- Advanced asset management with Hart pass-through I/O

Flexibility and Scalability

PACSystems provides a vast amount of I/O, communications, and specialty modules to handle a variety of process and discrete applications. It provides one of the best migration paths in the industry with the ability to bring Series 90*-30 modules directly into the PACSystems backplane to save rewiring and space. In addition, programs move with ease to the new programming and configuration environment, PAC Machine Edition, getting applications up and running in minutes.

| Feature | Benefit |
|--|--|
| High performance | <ul style="list-style-type: none"> ■ Gb communications for faster, higher volume of data for analysis ■ Latest CPU offers multi-core processor for reduced latency for more precise data or I/O control ■ Built in ports and switches reduce application complexity |
| Simplification | <ul style="list-style-type: none"> ■ Store large amounts of data for better system statistics and analysis ■ Store application files right on the control for fast fingertip access to drawings, debug or startup information, operational notes, and more ■ Built in media conversion and switches reduces I/O wiring cost and installation time |
| Security | <ul style="list-style-type: none"> ■ Easy-to-expand I/O system for future options or line capacity expansion ■ Broad range of discrete and analog I/O modules for application flexibility |
| PROFINET distributed I/O connectivity | <ul style="list-style-type: none"> ■ Open standard for high speed I/O connectivity ■ Support for Media Redundancy Protocol for robust operation ■ Replace devices without having to reconfigure them for improved uptime |

Specifications



| Part No. | IC695CPE302 (CPU with Energy Pack†) | IC695CPE305 (CPU with Energy Pack†) | IC695CPE310 (CPU with Energy Pack†) | IC695CPx400 (CPU only) IC695Cxk400 (CPU with Energy Pack†) | IC695CPE330 (CPU only) IC695CPK330 (CPU with Energy Pack†) |
|--------------------|---|---|---|---|---|
| Form Factor | Backplane | Backplane | Backplane | Standalone | Backplane |
| Storage | 2MB | 5MB | 10MB | 64MB | 64MB |
| I/O | <ul style="list-style-type: none"> ■ 16k Bits Discrete I/O ■ 16k Words for Analog I/O | <ul style="list-style-type: none"> ■ 32k Bits Discrete I/O ■ 32k Words for Analog I/O | <ul style="list-style-type: none"> ■ 32k Bits Discrete I/O ■ 32k Words for Analog I/O | <ul style="list-style-type: none"> ■ 32k Bits Discrete I/O ■ 32k Words for Analog I/O | <ul style="list-style-type: none"> ■ 32k Bits Discrete I/O ■ 32k Words for Analog I/O |

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|--------------------------------|---|---|---|---|---|
| Redundancy Support | | | | <ul style="list-style-type: none"> ■ Media Redundancy (MRP) ■ PROFINET System Redundancy (PNSR) | <ul style="list-style-type: none"> ■ Media Redundancy (MRP) ■ PROFINET System Redundancy (PNSR) |
| Ethernet Port | 1 - 10/100 | 1 - 10/100 | 1 - 10/100 | <ul style="list-style-type: none"> ■ 1- 10/100/1000 ■ 2- 2-port switch 10/100/1000 | <ul style="list-style-type: none"> ■ 1- 10/100/1000 ■ 1- 2-port switch 10/100/1000 |
| Ethernet Communications | <ul style="list-style-type: none"> ■ SRTP Client/Server ■ Modbus TCP/IP ■ OPC-UA Server ■ EGD | <ul style="list-style-type: none"> ■ SRTP Client/Server ■ Modbus TCP/IP ■ OPC-UA Server ■ EGD | <ul style="list-style-type: none"> ■ SRTP Client/Server ■ Modbus TCP/IP ■ OPC-UA Server ■ EGD | <ul style="list-style-type: none"> ■ SRTP Client/Server ■ Modbus TCP/IP ■ OPC-UA Server ■ EGD ■ PROFINET ■ DNP 3.0 Outstation | <ul style="list-style-type: none"> ■ SRTP Client/Server ■ Modbus TCP/IP ■ OPC-UA Server ■ EGD ■ PROFINET |
| USB Interface | 1 USB-A 2.0 | 1 USB-A 2.0 | 1 USB-A 2.0 | 2 USB-A 3.0 | 1 USB-A 2.0 |
| Memory Card | | | | Micro SD | 1 CFast (Very high speed Compactflash)‡ |
| Other Interface | 1 RS-232 | 1 RS-232 | <ul style="list-style-type: none"> ■ 1 RS-232 ■ 1 RS-485 | 1 RS-232 | — |

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