



PACSystems RSTi-EP CPE100

Programmable Automation Controller



The demand for improved asset performance and productivity is increasing in manufacturing and infrastructure markets. They require even smaller applications with robust execution performance and a range of connectivity options to real-time application status information and diagnostics.

GE's Automation & Controls has designed a small form factor, high performance controller that enables equipment builders to improve performance and flexibility of their machines while reducing size, complexity, and cost.

Small footprint. Big Impact.

Leverage the power and flexibility of PACSystems in smaller applications. RSTi-EP CPUs make it possible to incorporate the entire PACSystems programming suite in stand-alone applications or as auxiliary control in larger process applications that use RX3i. This simplifies training for operators and maintenance workers and streamlines application development and integration.

CPE100 supports real-time application status, remote diagnostics and:

- Dual LAN interfaces with four Ethernet ports
- Built-in RS-232 serial port
- Support for a range of communications protocols, including PROFINET
- Up to 1 MB of non-volatile user memory

All in just 1.5" (38.1mm) of DIN rail space.

Speaking the same language

With CPE100, you can use the same runtime as existing RX3i controllers and leverage existing application libraries and templates while scaling footprint and performance for smaller application installations. Fast, easy-to-configure PACSystems technology and an extensive range of I/O options support scalable automation and highly distributed modular machine designs.

PROFINET advantage

PROFINET I/O solutions from GE 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 GE's purpose-built I/O families through a PROFINET interface for advanced flexibility and performance.

Advanced security

Without proper cybersecurity in place, industrial controls are vulnerable to cyber threats. GE enlists defense-in-depth architecture to help secure assets from these threats. The RSTi-EP CPE100 is secure by design, incorporating technologies such as Trusted Platform Modules and secure, trusted, and measured boot. Centralized configuration allows encrypted firmware updates to be executed from a secure central location. And a suite of cybersecurity technology and tools help prevent unauthorized updates while built-in security protocols help protect against man-in-the middle and denial of service attacks.

FEATURE	BENEFIT
High performance	<ul style="list-style-type: none"> • Latest CPU features integrated System-on-Module processor for reduced latency and more precise data or I/O control • Full PACSystems library of programming capabilities helps enable quick and convenient application development
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 access to drawings, debug or startup information, operational notes, and more • Built-in multiport switch reduces I/O wiring cost and installation time • Three-port switch allows for I/O network redundancy via Media Redundancy Protocol and a connection for local HMI without extra networking equipment
Security	<ul style="list-style-type: none"> • Secure-by-design features include Trusted Platform Module and Measured Boot technology to enable encrypted, digitally signed firmware updates and help thwart attempts to introduce malware onto the CPU. These same technologies are included on the PACSystems RX3i product line. • Achilles Level 2 certification indicates that it meets industry standards for reliability and communications robustness • Role-based access control assigns user privileges based on pre-defined levels of authorization, enhancing system security
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 the need to reconfigure them for improved uptime

Specifications

Part Number

- EPSCPE100

Form Factor

- Standalone

Storage

- 1MB

I/O

- 2k Bits Discrete I/O
- 32k Words for Analog I/O

Field Agent Support

- External

Redundancy Support

- Media Redundancy Protocol (MRP)[†]

Ethernet Port

- 1 – 10/100
- 1 – 3-port switch 10/100

Ethernet Communications

- SRTP Client/Server – (Max 8 Connections)
- Modbus TCP/IP – (Max 8 Connections)
- OPC-UA Server – (Max 8 Clients)[†]
- EDG – (Max 16 Exchanges)
- PROFINET – (Max 8 IO Devices)

USB Interface

- 1 USB-A 2.0[†]

Memory Card

- Micro SD[†]

Other Interface

- 1 RS-232[†]

Environmental

- -40°C to 70°C

[†] Available later 2017