

PACSystems™ RXi2-BP Industrial PC

The Next Generation of Powerful, Reliable, Ruggedized Computing

Introduction

Emerson has developed the next generation of its powerful, expandable, and reliable industrial computers (IPC).

PACSystems RXi2 IPCs offer new processor choices, increased and faster storage, improved graphics, and enhanced security features.

The PACSystems RXi2-BP IPC delivers compact, rugged, mid to high range performance to run HMI, historian, and analytics applications right at the machine, enabling improved real-time control of operations and better integration into plant-wide systems.

Combining outstanding compute capabilities with a compact and robust enclosure, the PACSystems RXi2-BP is ideal for a range of demanding industrial applications.



High-Performance Computing

Emerson uses AMD Ryzen™ Embedded series processors based on their unmatched performance. The PACSystems RXi2-BP IPC has up to 16GB of ECC RAM, four Gigabit Ethernet interfaces, and industrial grade high-speed SSD disc storage to complete the high-performance design.

These features make the PACSystems RXi2-BP IPC the perfect platform for running industrial applications right at the machine, even in the harshest environments.

The PACSystems RXi2-BP design features 1 PCIe slot expandability. This functionality combined with advanced CPUs allows for flexible, high-performance computing. To help keep data and operations secure, the PACSystems RXi2-BP utilizes Trusted Platform Module (TPM) and Microsoft Secure Boot technology.

Pre-Loaded Edge Analytics and SCADA

Do more at the edge with the PACSystems RXi2-BP optionally pre-loaded with Emerson's PACEdge™ or Movicon.NExT™ HMI/SCADA software. This industrial PC delivers a powerful and tightly integrated solution with reliable, industrial computing and innovative, scalable and flexible automation software.

Based on OPC UA, Movicon.NExT is the first integrated automation software platform for connectivity, IIoT, machine HMI, HMI/SCADA and plant analytics.

Movicon.NExT enables connectivity to many native and integrated communication protocols. It provides enhanced visualization tools, including WPF, XAML and 3D graphics, and also enables data recording independent of data format used. With Movicon.NExT, users also get integrated scripting, an alarm management system, and analytics capable of acquiring production data in real time. These analytics provide KPI and OEE performance data, calculate machine downtime and can be used in tracking and scheduling production.

PACEdge is a singular, secure, and controlled environment for users to begin their Digital Transformation. Edge processing maximizes the value of your data so you can generate real insights and improve your operation's reliability, safety, and energy optimization. PACEdge provides the foundation for these improvements by delivering all aspects of edge processing with simplified IIoT application development, deployment, and administration. All components necessary in the IIoT application life cycle are brought together in this single package to provide a unified and secure interface to decrease your development time and increase your deployable footprint.

For more information:
www.Emerson.com/PACSystems

PACSYSTEMS™


EMERSON™

Greater Uptime

All aspects of the PACSystems RXi2-BP IPC have been engineered for reliability in harsh environments. With high quality industrial components, a rugged design, and fanless operation, it is perfect for both commercial and industrial applications. The PACSystems RXi2-BP IPC is a highly reliable IPC with a long life cycle.

The foundation of the PACSystems RXi2-BP IPC architecture is Emerson's rugged COM Express modular CPU platform. Emerson also incorporates patented thermal monitoring technology with sophisticated passive cooling techniques to provide the highest-performance, fanless industrial computing platform that can operate in extended temperature ranges.

Enhanced Productivity & Lower Total Cost of Ownership (TCO)

The foundation of the PACSystems RXi2-BP IPC combines high performance with reliability, enhancing productivity and reducing cost of ownership. The PACSystems RXi2-BP IPC delivers low TCO through features such as compact size, reduced maintenance, low power consumption, and ease of future performance upgrades enabled by our innovative rugged COM Express CPU architecture.

Feature	Benefit
AMD Ryzen™ Embedded V1000 and R1000 Series CPUs	High-performance AMD chip with an industrial temperature version. Coupled with our patented cooling technology, our performance is best-in-class.
Fanless operation	A robust, reliable solution with no moving parts and minimized dust contamination.
Four Gigabit Ethernet ports (3 with Time SYNC IEEE1588 and 802.1AS, 1 DASH enabled port)	Network implementation flexibility. Multiple high-speed Ethernet links for communication-centric applications with support for deterministic transfer of data/commands.
Small Form Factor	Mounting options provide flexibility for where the IPC can be installed. DIN Rail or Book Shelf Mounting available.

Specifications¹

Processor	
AMD Ryzen™ Embedded V1000 and R1000 Series	V1605B, 12-25 W, 4c 2.0GHz (3.6GHz), Vega 8 graphics
	V1404I, 12-25 W, 4c 2.0GHz (3.6GHz), Vega 8 graphics
	R1505G, 12-25 W, 2c 2.4GHz (3.3GHz), Vega 3 graphics
	R1305G, 8-10 W, 2c 1.5GHz (2.8GHz), Vega 3 graphics
Memory	
	Up to 16GB DDR4-2400
	Soldered, with ECC
Storage Interfaces	
	Primary storage device – M.2 SATA 6 gigabit/s
	Micro-SD slot, user accessible, supports OS boot, hot plug
Ethernet ¹	
	Four 10/100/1000BASE-T Ethernet ports
	Option to enable DASH remote management functionality on one port

¹ Additional features may be added by customization, please contact your regional sales representative to inquire.

² Operating temperature is dependent on the CPU and SSD choice, application software, orientation of the heat sink fins at free convection. For detailed recommendations please refer to Hardware Reference Manual or contact support team.

PACSystems RXi2-BP Industrial PC

Wireless Communication			
	Models are available with optional wireless connectivity (802.11ac/a/b/g/n & Bluetooth 5.0)		
Graphics Interface			
	DisplayPort++ HBR3 support (4 independent displays)		
USB Interface			
	Two USB 3.2 Gen 1x1		
	Two USB 2.0		
Serial Communications			
	One RS-232		
	One galvanically isolated RS422/485		
Expansion			
	One PCIe expansion slot (optional)		
LED			
	One green color user defined LED		
Others			
	Timers: Legacy PC-AT, Local APIC, HPET		
	OS and application watchdog timers		
	Thermal monitoring		
	RTC with Lithium coin cell battery		
Power			
	Input: 24 VDC (±25%) with surge protection, maximum current 2.4 A		
Environmental			
Thermal performance is highly dependent on end application workload, pre-configured processor TDP value, installed expansion cards, IPC mounting orientation etc. Please consult Hardware Reference Manual for details and recommendations.	Range	Operating ²	Storage
	Standard	0°C up to +70°C	-40°C up to +85°C
	Extended	-40°C up to +70°C	-40°C up to +85°C
	Humidity	5-95% @ +40°C	5-95% @ +40°C
	Altitude	6,600 ft. (2.0 km)	40000 ft. (12 km)
Firmware			
	UEFI AMI Aptio® 5		
Dimensions (H x W x D)			
Base unit without PCIe expansion slot	158 x 191 x 44.5 mm, Weight: 1.45 kg		
Unit with 1 PCIe expansion slot	158 x 191 x 81.8 mm, Weight: 1.73 kg		
Mechanical			
	Rugged aluminum and stainless-steel housing for optimal thermal management and durability		
	IP20 – Protection against particles		

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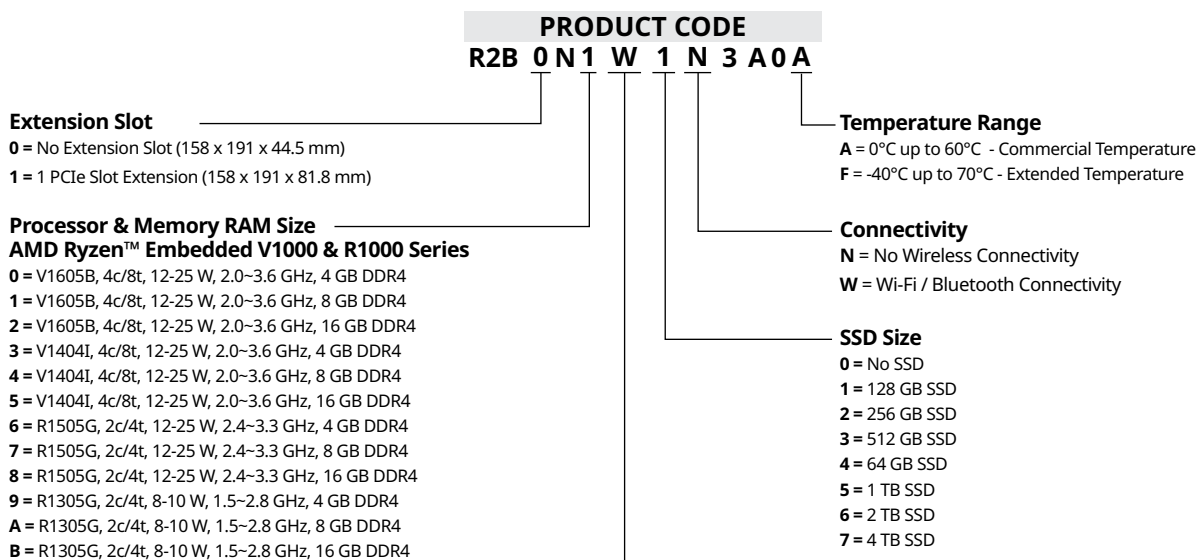
PACSystems RXi2-BP Industrial PC

Software Support	
	Windows® 10 IoT 2019 LTSC
	Linux® Ubuntu® 18.04, 20.04, and above (not pre-loaded except when buying PACEdge option)
	VxWorks® 7.0 (not pre-loaded)
	Movicon.NEXt 4.1 and above (pre-loaded options available)
	Pro.Lean™ (pre-loaded options available)
	PACEdge with Optional Movicon Connex™ & WebHMI (pre-loaded options available)
Safety & EMC	
	IEC/UL62368
	CE, FCC
	•UL Listed US/CAN Hazardous Locations: Class 1 Division 2 Groups ABCD •ATEX Zone 2
Mounting Options	
Slim (Book)	DIN Rail Kit (R2B00ACCRM01)
Panel Mount	Kit for unit without PCIe expansion slot (R2B00ACMP01)
	Kit for unit with PCIe expansion slot (R2B00ACMP02)

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² Operating temperature is dependent on the CPU and SSD choice, application software, orientation of the heat sink fins at free convection.
For detailed recommendations please refer to Hardware Reference Manual or contact support team.

Understanding Part Number Nomenclature



Operating System - Software - Mounting

N = No Operating System
A = Windows 10 IoT LTSC 2019
E = PACEdge + DIN Mount
C = PACEdge + DIN Mount + Movicon Connex for Linux 2k tags
W = PACEdge + DIN Mount + Movicon WebHMI Linux 2K tags

M = Windows 10 IoT LTSC 2019 + Movicon.Next Server/Client 500 tags
+ Alarm Dispatcher 1k tags + WebClient 1 user 1k tags + DIN Mount
F = Windows 10 IoT LTSC 2019 + Movicon.Next Server/Client 2k tags
+ Alarm Dispatcher 20k tags + WebClient 1 user 20k tags + DIN Mount
P = Windows 10 IoT LTSC 2019 + Movicon.Next Server/Client 5k
+ Alarm Dispatcher 20k tags + WebClient 1 user 20k tags + Pro.Lean 5 OEE + DIN Mount

Example: R2B 0 N 1 W 1 N 3 A 0 A

No Extension Slot; AMD Ryzen™ Embedded V1000 Series V1605B, 4c/8t, 12-25W, 2.0~3.6 GHz, 8 GB DDR4;
PACEdge + DIN Mount + Movicon WebHMI Linux 2K tags; 128 GB SSD; 0°C up to 60°C - Commercial Temperature

Ordering Information

Part Number	Description	Operating Temperature
R2B1N9N1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 128GB SSD, 1 PCIe slot, no OS	0°C up to 70°C
R2B1N9A1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT	0°C up to 70°C
R2B0N9N1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0N9A1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 128GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N9N4N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 64GB SSD, no OS	0°C up to 70°C
R2B0N9N4W3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 64GB SSD, no OS, WiFi	0°C up to 70°C
R2B0N9A4N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 64GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N9A4W3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 4GB RAM, 64GB SSD, Windows 10 IoT, WiFi	0°C up to 70°C
R2B1NAN1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, no OS	0°C up to 70°C
R2B1NAN1W3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, no OS, WiFi	0°C up to 70°C
R2B1NAA1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT	0°C up to 70°C
R2B1NAA1W3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT, WiFi	0°C up to 70°C
R2B0NAN1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0NAN1W3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, no OS, WiFi	0°C up to 70°C
R2B0NAA1N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0NAA1W3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 128GB SSD, Windows 10 IoT, WiFi	0°C up to 70°C
R2B0NAN4N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 64GB SSD, no OS	0°C up to 70°C
R2B0NAA4N3A0A	RXi2-BP Industrial PC: AMD R1305G 1.5GHz, 8GB RAM, 64GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N8N1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 16GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0N8A1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 16GB RAM, 128GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N8N2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 16GB RAM, 256GB SSD, no OS	0°C up to 70°C
R2B0N8A2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 16GB RAM, 256GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N8N3N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 16GB RAM, 512GB SSD, no OS	0°C up to 70°C
R2B0N8A3N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 16GB RAM, 512GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N6N1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 4GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0N6N2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 4GB RAM, 256GB SSD, no OS	0°C up to 70°C
R2B0N6N3N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 4GB RAM, 512GB SSD, no OS	0°C up to 70°C
R2B1N7N1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, no OS	0°C up to 70°C
R2B1N7A1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT	0°C up to 70°C
R2B0N7N1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0N7A1N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 128GB SSD, Windows 10 IoT	0°C up to 70°C
R2B1N7N2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 256GB SSD, 1 PCIe slot, no OS	0°C up to 70°C
R2B1N7A2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 256GB SSD, 1 PCIe slot, Win 10	0°C up to 70°C
R2B0N7N2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 256GB SSD, no OS	0°C up to 70°C

Ordering Information

Part Number	Description	Operating Temperature
R2B0N7N2W3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 256GB SSD, no OS, WiFi	0°C up to 70°C
R2B0N7A2N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 256GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N7A2W3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 256GB SSD, Windows 10 IoT, WiFi	0°C up to 70°C
R2B0N7N3N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 512GB SSD, no OS	0°C up to 70°C
R2B0N7A3N3A0A	RXi2-BP Industrial PC: AMD R1505G 2.4GHz, 8GB RAM, 512GB SSD, Windows 10 IoT	0°C up to 70°C
R2B1N5N1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, 1 PCIe slot, no OS	-40°C up to 65°C
R2B1N5N1W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, 1 PCIe slot, no OS, WiFi	-40°C up to 65°C
R2B1N5A1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT	-40°C up to 65°C
R2B1N5A1W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT, WiFi	-40°C up to 65°C
R2B0N5N1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, no OS	-40°C up to 70°C
R2B0N5N1W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, no OS, WiFi	-40°C up to 70°C
R2B0N5A1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, Windows 10 IoT	-40°C up to 70°C
R2B0N5A1W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 128GB SSD, Windows 10 IoT, WiFi	-40°C up to 70°C
R2B1N5N2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, 1 PCIe slot, no OS	-40°C up to 65°C
R2B1N5N2W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, 1 PCIe slot, no OS, WiFi	-40°C up to 65°C
R2B1N5A2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, 1 PCIe slot, Windows 10 IoT	-40°C up to 65°C
R2B1N5A2W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, 1 PCIe slot, Windows 10 IoT, WiFi	-40°C up to 65°C
R2B0N5N2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, no OS	-40°C up to 70°C
R2B0N5N2W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, no OS, WiFi	-40°C up to 70°C
R2B0N5A2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, Windows 10 IoT	-40°C up to 70°C
R2B0N5A2W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 256GB SSD, Windows 10 IoT, WiFi	-40°C up to 70°C
R2B1N5N3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 512GB SSD, 1 PCIe slot, no OS	-40°C up to 65°C
R2B1N5A3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 512GB SSD, 1 PCIe slot, Windows 10 IoT	-40°C up to 65°C
R2B0N5N3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 512GB SSD, no OS	-40°C up to 70°C
R2B0N5A3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 16GB RAM, 512GB SSD, Windows 10 IoT	-40°C up to 70°C
R2B0N3N1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 4GB RAM, 128GB SSD, no OS	-40°C up to 70°C
R2B0N3N2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 4GB RAM, 256GB SSD, no OS	-40°C up to 70°C
R2B0N3N3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 4GB RAM, 512GB SSD, no OS	-40°C up to 70°C
R2B1N4N1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, no OS	-40°C up to 65°C
R2B1N4A1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT	-40°C up to 65°C
R2B0N4N1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 128GB SSD, no OS	-40°C up to 70°C
R2B0N4N1W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 128GB SSD, no OS, WiFi	-40°C up to 70°C

Ordering Information

Part Number	Description	Operating Temperature
R2B0N4A1N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 128GB SSD, Windows 10 IoT	-40°C up to 70°C
R2B0N4A1W3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 128GB SSD, Windows 10 IoT, WiFi	-40°C up to 70°C
R2B1N4N2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 256GB SSD, 1 PCIe slot, no OS	-40°C up to 65°C
R2B1N4A2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 256GB SSD, 1 PCIe slot, Windows 10 IoT	-40°C up to 65°C
R2B0N4N2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 256GB SSD, no OS	-40°C up to 70°C
R2B0N4A2N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 256GB SSD, Windows 10 IoT	-40°C up to 70°C
R2B1N4N3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 512GB SSD, 1 PCIe slot, no OS	-40°C up to 65°C
R2B1N4A3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 512GB SSD, 1 PCIe slot, Windows 10 IoT	-40°C up to 65°C
R2B0N4N3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 512GB SSD, no OS	-40°C up to 70°C
R2B0N4A3N3A0F	RXi2-BP Industrial PC: AMD V1404I 2.0GHz, 8GB RAM, 512GB SSD, Windows 10 IoT	-40°C up to 70°C
R2B1N2N1N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 128GB SSD, 1 PCIe slot, no OS	0°C up to 65°C
R2B1N2A1N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 128GB SSD, 1 PCIe slot, Windows 10 IoT	0°C up to 65°C
R2B0N2A1N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 128GB SSD, Windows 10 IoT	0°C up to 70°C
R2B1N2N2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 256GB SSD, 1 PCIe slot, no OS	0°C up to 65°C
R2B1N2A2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 256GB SSD, 1 PCIe slot, Windows 10 IoT	0°C up to 65°C
R2B0N2N2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 256GB SSD, no OS	0°C up to 70°C
R2B0N2A2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 256GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N2N3N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 512GB SSD, no OS	0°C up to 70°C
R2B0N2A3N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 16GB RAM, 512GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N0N1N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 4GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0N0N2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 4GB RAM, 256GB SSD, no OS	0°C up to 70°C
R2B0N0N3N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 4GB RAM, 512GB SSD, no OS	0°C up to 70°C
R2B0N1N1N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 8GB RAM, 128GB SSD, no OS	0°C up to 70°C
R2B0N1A1N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 8GB RAM, 128GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N1N2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 8GB RAM, 256GB SSD, no OS	0°C up to 70°C
R2B0N1A2N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 8GB RAM, 256GB SSD, Windows 10 IoT	0°C up to 70°C
R2B0N1N3N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 8GB RAM, 512GB SSD, no OS	0°C up to 70°C
R2B0N1A3N3A0A	RXi2-BP Industrial PC: AMD V1605B 2.0GHz, 8GB RAM, 512GB SSD, Windows 10 IoT	0°C up to 70°C
R2B00ACCRM01	RXi2-BP Industrial PC Accessory: 1pcs DIN Rail Mounting Kit R2B	-
R2B00ACCMPO2	RXi2-BP Industrial PC Accessory: 1pcs Panel Mounting Kit for one-slot variant	-
R2B00ACCMPO1	RXi2-BP Industrial PC Accessory: 1pcs Panel Mounting Kit R2B for zero-slot variant	-

Pre-Loaded Software Devices

Part Number	Description	Operating Temperature
R2B1NAM1N3A0A	RXi2-BP Industrial PC: AMD R1305G CPU, 8GB RAM, 128GB SSD, 1 PCIe Slot, Windows, Movicon.Next, Alarm Dispatcher, Web Client, 500 Tags	0°C up to 70°C
R2B1NAM1W3A0A	RXi2-BP Industrial PC: AMD R1305G CPU, 8GB RAM, 128GB SSD, 1 PCIe Slot, Windows, WiFi, Movicon.Next, Alarm Dispatcher, Web Client, 500 Tags	0°C up to 70°C
R2B0NAM1N3A0A	RXi2-BP Industrial PC: AMD R1305G CPU, 8GB RAM, 128GB SSD, Windows, Movicon.Next, Alarm Dispatcher, Web Client, 500 Tags	0°C up to 70°C
R2B0NAM1W3A0A	RXi2-BP Industrial PC: AMD R1305G CPU, 8GB RAM, 128GB SSD, Windows, WiFi, Movicon.Next, Alarm Dispatcher, Web Client, 500 Tags	0°C up to 70°C
R2B1N4F1N3A0F	RXi2-BP Industrial PC: AMD V1404I CPU, 8GB RAM, 128GB SSD, 1 PCIe Slot, -40 to 65C, Windows, Movicon.Next, Alarm Dispatcher, Web Client, 2000 Tags	-40°C up to 65°C
R2B1N4F1W3A0F	RXi2-BP Industrial PC: AMD V1404I CPU, 8GB RAM, 128GB SSD, 1 PCIe Slot, -40 to 65C, Windows, WiFi, Movicon.Next, Alarm Dispatcher, Web Client, 2000 Tags	-40°C up to 65°C
R2B0N4F1N3A0F	RXi2-BP Industrial PC: AMD V1404I CPU, 8GB RAM, 128GB SSD, -40 to 70C, Windows, Movicon.Next, Alarm Dispatcher, Web Client, 2000 Tags	-40°C up to 70°C
R2B0N4F1W3A0F	RXi2-BP Industrial PC: AMD V1404I CPU, 8GB RAM, 128GB SSD, -40 to 70C, Windows, WiFi, Movicon.Next, Alarm Dispatcher, Web Client, 2000 Tags	-40°C up to 70°C
R2B1N2P2N3A0A	RXi2-BP Industrial PC: AMD V1605B CPU, 16GB RAM, 256GB SSD, 1 PCIe Slot, Windows, Movicon.Next, Alarm Dispatcher, Web Client, PRO.LEAN, 5000 Tags	0°C up to 65°C
R2B1N2P2W3A0A	RXi2-BP Industrial PC: AMD V1605B CPU, 16GB RAM, 256GB SSD, 1 PCIe Slot, Windows, Wifi, Movicon.Next, Alarm Dispatcher, Web Client, PRO.LEAN, 5000 Tags	0°C up to 65°C
R2B0N2P2N3A0A	RXi2-BP Industrial PC: AMD V1605B CPU, 16GB RAM, 256GB SSD, Windows, Movicon.Next, Alarm Dispatcher, Web Client, PRO.LEAN, 5000 Tags	0°C up to 70°C
R2B0N2P2W3A0A	RXi2-BP Industrial PC: AMD V1605B CPU, 16GB RAM, 256GB SSD, Windows, WiFi, Movicon.Next, Alarm Dispatcher, Web Client, PRO.LEAN, 5000 Tags	0°C up to 70°C
R2B0N1W1N3A0A	RXi2-BP w/ PACEdge & Movicon Connex & WebHMI: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, DIN rail mounting & no PCIe slot	0°C up to 70°C
R2B0N1W1W3A0A	RXi2-BP w/ PACEdge & Movicon Connex & WebHMI: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, WiFi, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B0N9C4N3A0A	RXi2-BP w/ PACEdge & Movicon Connex: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a dual-core 1.5GHz processor, 4G RAM, 64G SSD, 0-70C temp range, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B1N1C1N3A0A	RXi2-BP w/ PACEdge & Movicon Connex: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, DIN rail mounting & 1-PCIe slot.	0°C up to 65°C
R2B0N1C1N3A0A	RXi2-BP w/ PACEdge & Movicon Connex: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B0N1C1W3A0A	RXi2-BP w/ PACEdge & Movicon Connex: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, WiFi, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B1N1W1N3A0A	RXi2-BP w/ PACEdge, Movicon Connex & WebHMI: Movicon license includes the Automation Driver Pack, Basic Driver Pack & 2k OPC UA Tags. The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, DIN rail mounting & 1-PCIe slot.	0°C up to 65°C
R2B0N9E4N3A0A	RXi2-BP w/ PACEdge: The RXi2-BP has a dual-core 1.5GHz processor, 4G RAM, 64G SSD, 0-70C temp range, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B0N1E1N3A0A	RXi2-BP w/ PACEdge: The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0 to 70C temp range, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B0N1E1W3A0A	RXi2-BP w/ PACEdge: The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0 to 70C temp range, WiFi, DIN rail mounting & no PCIe slot.	0°C up to 70°C
R2B1N1E1N3A0A	RXi2-BP w/ PACEdge: The RXi2-BP has a quad-core 2GHz processor, 8G RAM, 128G SSD, 0-70C temp range, DIN rail mounting & 1-PCIe slot.	0°C up to 65°C

PACSystems™ RXi2-XP Industrial PC

The Next Generation Of Ruggedized Computing

Introduction

Emerson has developed the next generation of its powerful, expandable, and reliable industrial computers (IPC). RXi2 IPCs offer new processor choices, increased and faster storage, improved graphics, and enhanced security features.

The RXi2-XP IPC delivers compact, rugged, mid-to high-range performance computing capabilities to run HMI, historian, and analytics applications right at the machine to enable improved real-time control of operations and better integration into plant-wide systems.

Combining outstanding computing capabilities with the added expandability of 0, 1, 2 or 4 PCI Express slots and CFast storage, the RXi2-XP is ideal for a range of demanding industrial applications.

High-Performance Computing

Emerson uses the latest Intel processors based on their unmatched performance. The RXi2-XP IPC has up to 32GB of ECC RAM, 5 Gigabit Ethernet interfaces, and industrial grade high-speed HDD storage (or optional SSD disk storage) to complete the high-performance design.

These features make the RXi2-XP IPC the perfect platform for running industrial applications right at the machine, even in the harshest environments.

The RXi2-XP IPC provides additional application flexibility with both mini PCI Express and low-profile PCI Express slots. This expandability combined with advanced CPUs delivers high-performance, computing.

To help keep data and operations secure, the RXi2-XP utilizes Trusted Platform Module (TPM) and Microsoft Secure Boot technology.



Greater Uptime

All aspects of the RXi2-XP IPC have been engineered for reliability in harsh environments, from the use of all industrial grade components to its fanless design. The core of the RXi2-XP IPC architecture is Emerson's rugged COM Express modular CPU platform. Emerson incorporates patented thermal monitoring technology with sophisticated passive cooling techniques to provide the highest-performance, fanless industrial computing platform that can operate in extended temperature ranges.

Enhanced Productivity & Lower TCO

The RXi2-XP IPC combines high performance with reliability, enhancing productivity and reducing cost of ownership.

The RXi2-XP IPC delivers low TCO through features such as compact size, reduced maintenance, low power consumption, and ease of future performance upgrades enabled by our innovative rugged COM Express CPU architecture.

For more information:
www.Emerson.com/PACSystems

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PACSystems™ RXi2-XP Industrial PC

Feature	Benefit
6th Generation Intel® Core™ i3, i5, i7 and Xeon® CPUs	Delivers high-performance computing for applications that load, manipulate and store large amounts of data, or handle multiple communication ports in real-time.
Fanless operation	A robust, reliable solution with no moving parts and minimized dust contamination.
5 Gigabit Ethernet ports (four with Time SYNC IEEE1588 and 802.1AS)	Network implementation flexibility. Multiple high-speed Ethernet links for communication-centric applications with support for deterministic transfer of data/commands.
0, 1, 2 or 4 PCIe Expansion slots	Add new functionality on demand to support specific application needs.

Specifications

Processor	
	Intel® core™ i3-6102E Processor, 25W 2c 1.9GHz 3MB cache
	Intel® core™ i5-6440EQ Processor, 45W 4c 2.7GHz (-3.4GHz) 6MB no ECC
	Intel® core™ i7-6820EQ Processor, 45W 4c 2.8GHz (-3.5GHz) 8MB no ECC
	Intel® XEON® Processor E3-1505L v5, 25W 4c 2.0GHz (-2.8GHz) 8MB
	Intel® XEON® Processor E3-1505M v5, 45/35W 4c 2.8GHz (-3.7GHz) 8MB
Memory	
	Up to 32GB DDR4-2133
	Soldered, with ECC
Storage Interfaces	
	Primary storage device – M.2 PCI Express Gen3 x4 or M.2 SATA Gen3
	Secondary storage option – Twin 2.5" SATA drive bays, hot swap and RAID enabled
	CFast slot, user accessible, supports boot, hot plug
Ethernet	
	Four 1-gigabit Ethernet channels – RJ-45 standard, SFP optional
	One 1-gigabit Ethernet channel w/ remote management capability – RJ45
Wireless Communication	
	LTE modem option using Mini-PCIE with UIM card holder
	Wifi/Bluetooth radio option using M.2 expansion slot

PACSystems™ RXi2-XP Industrial PC

Video/Graphics Interface	
	Twin DisplayPort++ 1.2 for a total of 3 independent displays
USB Interface	
	Four USB 3.0 external
	Two USB 2.0 internal
Serial Communications	
	2 to 4 channels
	Two RS232, two RS422/485
Expansion	
	Mini-PCIE card site for NvSRAM card, LTE modem, or other
	M.2 communications slot for WiFi and Bluetooth
	PCI Express expansion slots: - Zero - One Gen3 x4 - Two Gen2 x4 - Four 1x Gen2 x4, 3 Gen2 x1
Non-Volatile Memory	
	512 KB, 1MB or 2MB NvSRAM
	Ethernet Link/Activity
	One User Defined LED
LED	
	Power, TPM, Temperature, SATA
	Ethernet Link/Activity
	One User Defined LED
Others	
	Timers: Legacy PC-AT, HPET
	Twin Watchdog Timers (OS, application)
	Thermal monitoring
	RTC with Lithium coin cell battery
Power	
	Input: 24V DC (±25%) with protection
Environmental	
	All values under typical conditions without added expansion slot cards. Extended temperature variants are available upon request. The maximum extended temperature ranges mentioned in the table below are achievable with a specific choice of CPU and storage, and without extension cards installed in the system. For detailed information please read the manual.

PACSystems™ RXi2-XP Industrial PC

Range	Operating	Storage
Standard	0°C to +60°C	-40°C to +85°C
Extended	-40°C to +70°C ²	-40°C to +85°C

¹ At 100% CPU load temperature range requires vertical orientation of the heat sink fins at free convection.

² Operating temperature is dependent on the CPU and SSD choice, application software, orientation of the heat sink fins at free convection. For detailed recommendations please contact support team.

Range	Operating	Storage
Humidity	5-95% @ +40°C	5-95% @ +40°C
Altitude	6,600 ft. (2.0km)	40000 ft. (12 km)

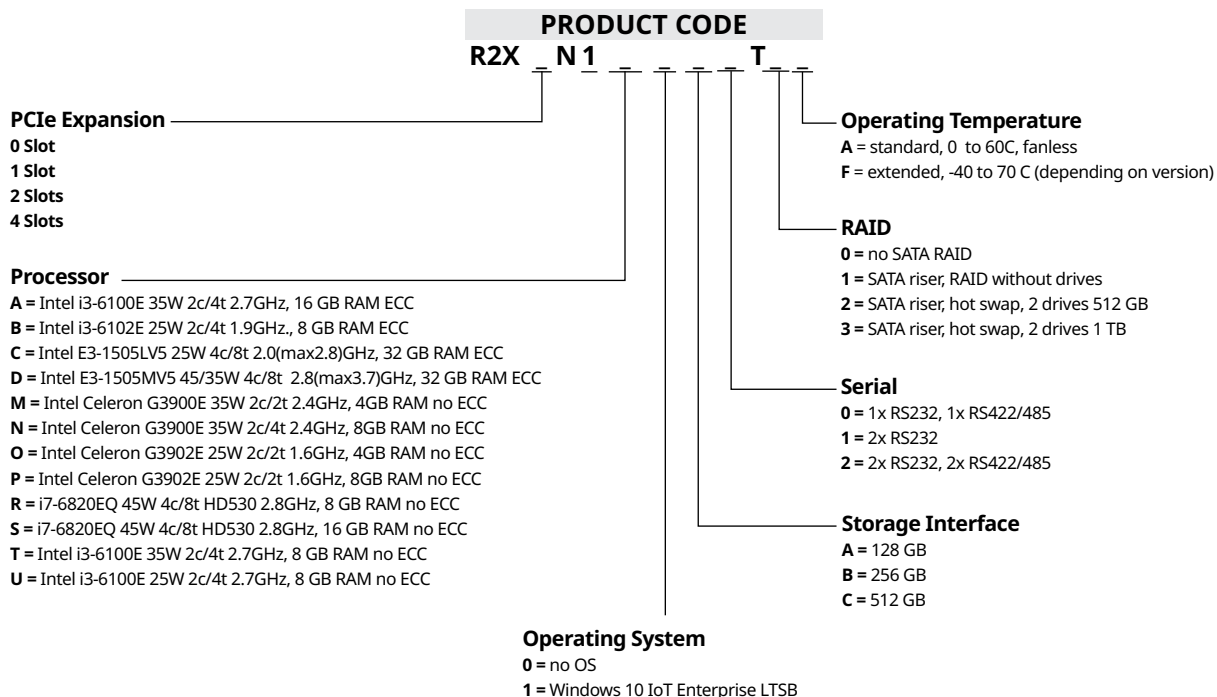
BIOS
UEFI AMI Aptio® 5
Dimensions (H x W x D)
0 slot: 252 x 203 x 108.5 mm (9.92 x 8 x 4.24 in) Weight: 4,2kg
1 slot: 252 x 203 x 132 mm (9.92 x 8 x 4.24 in) Weight – 4,3kg
2 slot: 252 x 203 x 155.5 mm (9.92 x 8 x 6.13 in) Weight: 4,4kg
4 slot: 252 x 203 x 108.5 mm (9.92 x 8 x 4.24 in) Weight – 4,6kg

Mechanical
Rugged aluminum and stainless steel housing for optima thermal management and durability
IP20 – Protection against particles
Flat and Slim (Book) mounting orientation options
Software Support
Microsoft® Windows® 10 Professional 64-Bit
Linux® Kernel 4.4
VXWorks® 7.0
Safety
Designed to meet standard UL1950, CE class A, FCC-A
Designed to meet marine class A



Slim version available

Understanding Part Number Nomenclature



Example: R2X 4 N 1 B 1 A 2 T 0 A

Ordering Information

Part Number	Description	Operating Temperature
R2X0N1R0B1T0A	Quad Core i7-6820EQ, 2.8GHz, 0 Slot, 256GB SSD, 16GB DDR4, 2xRS232, 5xRJ45, No OS	0°C to +60°C
R2X0N1R1B1T0A	Quad Core i7-6820EQ, 2.8GHz, 0 Slot, 256GB SSD, 16GB DDR4, 2xRS232, 5xRJ45, Windows 10	0°C to +60°C
R2X1N1B0A1T0A	Dual Core i3-6102E, 1.9Hz, 1 Slot, 128GB SSD, 8GB DDR4 ECC, 2xRS232, 5xRJ45, Windows 10	0°C to +60°C
R2X1N1B1A1T0A	Dual Core i3-6102E, 1.9Hz, 1 Slot, 128GB SSD, 8GB DDR4 ECC, 2xRS232, 5xRJ45, Windows 10	0°C to +60°C
R2X1N1C0A1T0A	Quad Core XEON E3-1505Lv5, 2.0GHz, 1 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 5xRJ45, No OS	0°C to +60°C
R2X1N1C1A1T0A	Quad Core XEON E3-1505Lv5, 2.0GHz, 1 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 5xRJ45, Windows 10	0°C to +60°C
R2X2N1C0B2T0F	Quad Core XEON E3-1505Lv5, 2.0GHz, 2 Slot, 256GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	-40°C to +70°C
R2X4N1B0A2T0A	Dual Core i3-6102E, 1.9GHz, 4 Slot, 128GB SSD, 8GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C to +60°C
R2X4N1B1A2T0A	Dual Core i3-6102E, 1.9GHz, 4 Slot, 128GB SSD, 8GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C to +60°C
R2X4N1C0A2T0A	Quad Core XEON E3-1505Lv5, 2.0GHz, 4 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C to +60°C
R2X4N1C1A2T0A	Quad Core XEON E3-1505Lv5, 2.0GHz, 4 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C to +60°C
R2X4N1D0C2T0A	Quad Core XEON E3-1505M, 2.8GHz, 4 Slot, 512GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C to +60°C
R2X4N1D1C2T0A	Quad Core XEON E3-1505M, 2.8GHz, 4 Slot, 512GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C to +60°C

PACSystems™ RXi2-UP Industrial PC

Reliable, Ruggedized, High-Performance Computing

Introduction

PACSystems RXi2 IPCs offer a range of processor choices, increased and faster storage, improved graphics, and enhanced security features.

The PACSystems RXi2-UP IPC delivers rugged, high-performance computing capabilities to run HMI, historian, and analytics applications right at the machine, to enable improved real-time control of operations and better integration into plant-wide systems.

Combining outstanding computing capabilities with the added expandability of 1, 2 or 4 PCI Express slots and CFast storage, the PACSystems RXi2-UP is ideal for a range of demanding industrial applications.

High-Performance Computing

The PACSystems RXi2-UP IPC has high-performance Intel Xeon processors, up to 32GB of ECC RAM, 5 Gigabit Ethernet interfaces, and industrial grade SSD disk storage to complete the high-performance design.

It provides additional application flexibility with both, mini PCI Express and low-profile PCI Express slots. This expandability combined with advanced CPUs delivers high-performance, computing.

PACSystems RXi2-UP IPC incorporates patented thermal monitoring technology with sophisticated passive cooling techniques to provide the highest performance, fanless industrial edge computing platform. So, it can operate at peak computing performance in extended temperature ranges right at the machine, without having to throttle the CPU.

Pre-Loaded Edge Analytics and SCADA

Do more at the edge with the PACSystems RXi2-UP optionally pre-loaded with Emerson's Movicon.NExT HMI/SCADA software. This industrial PC delivers a powerful and tightly integrated solution with reliable, industrial computing and innovative, scalable and flexible automation software. Based on OPC UA, Movicon.NExT is the first integrated automation software platform for connectivity, IIoT, machine HMI, HMI/SCADA and plant analytics.



Movicon.NExT enables connectivity to many native and integrated communication protocols. It provides enhanced visualization tools, including WPF, XAML and 3D graphics, and also enables data recording independent of data format used. With Movicon.NExT, users also get integrated scripting, an alarm management system, and analytics capable of acquiring production data in real time. These analytics provide KPI and OEE performance data, calculate machine downtime and can be used in tracking and scheduling production.

Greater Uptime

All aspects of the PACSystems RXi2-UP IPC have been engineered for reliability in harsh industrial environments, from the use of all industrial grade components to its fanless design. To help keep data and operations secure, the PACSystems RXi2-UP utilizes Trusted Platform Module (TPM) and Microsoft Secure Boot technology. Security coupled with PACSystems RXi2-UP's strong shock and vibration resistance and available RAID storage options keeps your data protected and maximizes uptime.

For more information:
www.Emerson.com/PACSystems

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PACSystems RXi2-UP Industrial PC

Enhanced Productivity & Lower Total Cost of Ownership (TCO)

The PACSystems RXi2-UP IPC combines high performance with reliability, enhancing productivity and reducing total cost of ownership.

The PACSystems RXi2-UP IPC delivers low TCO through features such as compact size, reduced maintenance, low power consumption, and ease of future performance upgrades enabled by our innovative rugged COM Express CPU architecture.

Feature	Benefit
7th Generation Intel® Xeon® CPUs	Delivers high-performance computing for applications that load, manipulate and store large amounts of data, or handle multiple communication ports in real-time.
Fanless operation	A robust, reliable solution with no moving parts and minimized dust contamination.
5 Gigabit ethernet ports (Four with Time SYNC IEEE1588 and 802.1AS)	Network implementation flexibility. Multiple high-speed Ethernet links for communication-centric applications with support for deterministic transfer of data/commands.
0, 1, 2 or 4 PCIe expansion slots	Add new functionality on demand to support specific application needs.

Specifications

Processor	
7th Generation Intel® Xeon®	Intel® XEON® Processor E3-1505M v6, 35/45W 4c8t 3.0GHz (-4.0GHz) 8MB
	Intel® XEON Processor E3-1505L v6, 25W 4c8t 2.2GHz (-3.0GHz) 8MB
	Intel® XEON® Processor E3-1501M v6, 45W 4c4t 2.9GHz (-3.6GHz) 6MB
Memory	
	Up to 32GB DDR4-2400
	Soldered, with ECC
Storage Interfaces	
	Primary storage device – M.2 SATA Gen3 (User-installed M.2 NVMe SSD supported)
	Secondary storage option – Twin 2.5" SATA drive bays, hot swap and RAID (0 or 1 configuration) enabled on specific SKUs.
	CFast slot, user accessible, supports boot, hot plug
Ethernet	
	Four 1-gigabit Ethernet channels – RJ-45 standard
	One 1-gigabit Ethernet channel w/ remote management capability, Intel's AMT – RJ45

¹ Additional features may be added by customization, please contact your regional sales representative to inquire.

² Operating temperature is dependent on the CPU and SSD choice, application software, orientation of the heat sink fins at free convection.
For detailed recommendations please refer to Hardware Reference Manual or contact support team.

PACSystems RXi2-UP Industrial PC

Wireless Communication			
	User-installed and certified LTE modem capability using mini-PCIe with UIM card holder		
	User-installed Wifi/Bluetooth radio capability using M.2 or mini-PCIe or PCIe expansion slot (FCC certified module required)		
Graphics Interface			
	Twin DisplayPort++ 1.2 for a total of 3 independent displays for up to 4K resolution		
USB Interface			
	Four USB 3.0 external		
	Two USB 2.0 internal		
Serial Communications			
	2 to 4 channels		
	Two RS232, two RS422/485 depending on SKU		
Expansion			
	Mini-PCIe card site for user-installed/certified NvSRAM, WiFi, Bluetooth, LTE modem card or other M.2 communications slot for user-installed WiFi and Bluetooth		
	PCI Express expansion slots: - Zero - One Gen3 x4 - Two Gen2 x4 - Four: 1 slot Gen2 x4 and 3 slots Gen2 x1		
LED			
	LED indicators: Power, TPM, Temperature, SATA		
	Ethernet Link/Activity		
	One User Defined LED		
Others			
	Timers: Legacy PC-AT, HPET		
	Twin Watchdog Timers (OS, application)		
	Holistic, system-level, thermal monitoring		
	RTC with Lithium coin cell battery		
Power			
	Input: 24V DC (±25%) with surge protection		
	Maximum current: 3.5A		
Environmental			
All values under typical conditions without added expansion slot cards. Extended temperature variants are available upon request. The maximum extended temperature ranges mentioned in the table below are achievable with a specific choice of CPU and storage, and without extension cards installed in the system. <i>For detailed information please read the manual.</i>	Range	Operating ²	Storage
	Standard	0°C up to +70°C	-40°C up to +85°C
	Extended	-40°C up to +70°C ²	-40°C up to +85°C
	Humidity	5-95% @ +40°C	5-95% @ +40°C
	Altitude	6,600 ft. (2.0 km)	40000 ft. (12 km)
Firmware			
	UEFI AMI Aptio® 5		

¹ At 100% CPU load temperature range requires vertical orientation of the heat sink fins at free convection.

² Operating temperature is dependent on the CPU and SSD choice, application software, orientation of the heat sink fins at free convection. For detailed recommendations please contact support team.

³ Extended Temperature Range available upon request.

⁴ RAID when using HDD (v.s. SSD) Drives brings Operating Temperature limits down to a maximum of 40°C depending on chosen HDD and HDD workload.

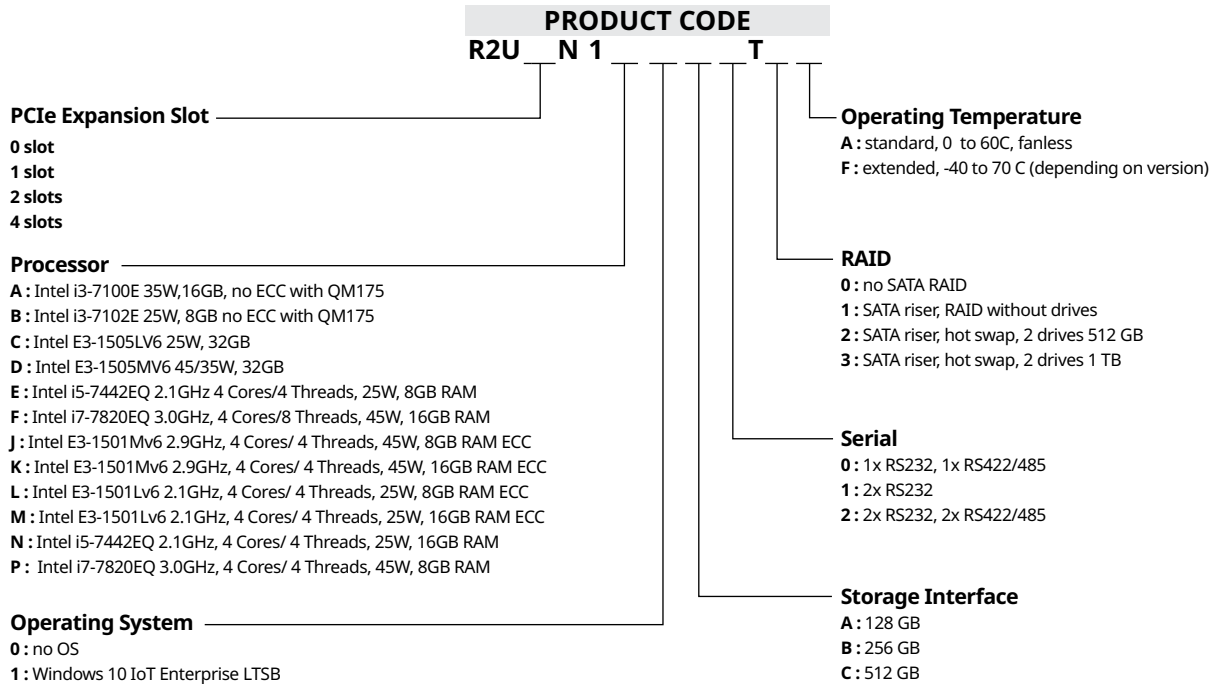
PACSystems RXi2-UP Industrial PC

Mechanical	
	Rugged aluminum and stainless-steel housing for optimal thermal management and durability
	IP20 – Protection against particles
	Flat and Slim (Book) mounting orientation options
Software Support	
	Microsoft® Windows® 10 IoT 2019 LTSC
	Linux® Kernel 4.9 (not pre-loaded)
	VxWorks® 7.0 (not pre-loaded)
	Movicon.NEXT 4.1 and above (pre-loaded options available)
	Pro.Lean™ (pre-loaded options available)
Safety & EMC	
	IEC/UL62368
	CE, FCC
Dimensions (H x W x D)	
Dimensions	0-slot: 252 x 203 x 108.5 mm (9.92 x 8 x 4.24 in)
	1-slot: 252 x 203 x 135.5 mm (9.92 x 8 x 5.33 in)
	2-slot: 252 x 203 x 155.5 mm (9.92 x 8 x 6.13 in)
	4-slot: 252 x 203 x 195.5 mm (9.92 x 8 x 7.70 in)
Weight	0-slot: 3.9 kg (8.60 lbs)
	1-slot: 4.2 kg (9.26 lbs)
	2-slot: 4.4 kg (9.70 lbs)
	4-slot: 4.7 kg (10.34 lbs)

¹ Additional features may be added by customization, please contact your regional sales representative to inquire.

² Operating temperature is dependent on the CPU and SSD choice, application software, orientation of the heat sink fins at free convection. For detailed recommendations please refer to Hardware Reference Manual or contact support team.

Understanding Part Number Nomenclature



Example: R2U 2 N 1 D 0 B 2 T 0 F

Ordering Information

Part Number	Description	Operating Temperature
R2U0N1B0A1T0A	RXi2-UP IPC, Dual Core i3-7102E, 2.1GHz, 0 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, No OS	0°C up to +60°C
R2U0N1B1A1T0A	RXi2-UP IPC, Dual Core i3-7102E, 2.1GHz, 0 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C
R2U0N1E0A1T0A	RXi2-UP IPC, Quad Core i5-7442EQ, 2.1GHz, 0 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, No OS	0°C up to +60°C
R2U0N1E1A1T0A	RXi2-UP IPC, Quad Core i5-7442EQ, 2.1GHz, 0 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C
R2U0N1J0B1T0A	RXi2-UP IPC, Quad Core XEON E3-1501M, 2.9GHz, 0 Slot, 256GB SSD, 8GB DDR4 ECC, 2xRS232, 5xRJ45, No OS,	0°C up to +60°C
R2U0N1J1B1T0A	RXi2-UP IPC, Quad Core XEON E3-1501M, 2.9GHz, 0 Slot, 256GB SSD, 8GB DDR4 ECC, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C
R2U1N1B0A1T0A	RXi2-UP IPC, Dual Core i3-7102E, 2.1GHz, 1 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, No OS	0°C up to +60°C
R2U1N1B1A1T0A	RXi2-UP IPC, Dual Core i3-7102E, 2.1GHz, 1 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C
R2U1N1E0A1T0A	RXi2-UP IPC, Quad Core i5-7442EQ, 2.1GHz, 1 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, No OS	0°C up to +60°C
R2U1N1E1A1T0A	RXi2-UP IPC, Quad Core i5-7442EQ, 2.1GHz, 1 Slot, 128GB SSD, 8GB DDR4, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C
R2U1N1J1B1T0A	RXi2-UP IPC, Quad Core XEON E3-1501M, 2.9GHz, 1 Slot, 256GB SSD, 8GB DDR4 ECC, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C

Ordering Information

Part Number	Description	Operating Temperature
R2U1N1F1A1T0A	RXi2-UP IPC, Quad Core i7-7820EQ, 3.0GHz, 1 Slot, 128GB SSD, 16GB DDR4, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C up to +60°C
R2U1N1C0A1T0A	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 1 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C up to +60°C
R2U1N1C1A1T0A	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 1 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C up to +60°C
R2U2N1J1B2T0A	RXi2-UP IPC, Quad Core XEON E3-1501M, 2.9GHz, 2 Slot, 256GB SSD, 8GB DDR4 ECC, 2xRS232, 5xRJ45, Windows 10	0°C up to +60°C
R2U2N1F1A2T0A	RXi2-UP IPC, Quad Core i7-7820EQ, 3.0GHz, 2 Slot, 128GB SSD, 16GB DDR4, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C up to +60°C
R2U2N1D0A2T0A	RXi2-UP IPC, Quad Core XEON E3-1505Mv6, 3.0GHz, 2 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C up to +60°C
R2U2N1D1A2T0A	RXi2-UP IPC, Quad Core XEON E3-1505Mv6, 3.0GHz, 2 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows	0°C up to +60°C
R2U2N1C0B2T0F	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 2 Slot, 256GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	-40°C up to +70°C
R2U2N1C1B2T0F	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 2 Slot, 256GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	-40°C up to +70°C
R2U4N1F0A2T0A	RXi2-UP IPC, Quad Core i7-7820EQ, 3.0GHz, 4 Slot, 128GB SSD, 16GB DDR4, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C up to +60°C
R2U4N1F1A2T0A	RXi2-UP IPC, Quad Core i7-7820EQ, 3.0GHz, 4 Slot, 128GB SSD, 16GB DDR4, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C up to +60°C
R2U4N1C0B2T0A	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 4 Slot, 256GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C up to +60°C
R2U4N1C1B2T0A	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 4 Slot, 256GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C up to +60°C
R2U4N1D0C2T0A	RXi2-UP IPC, Quad Core XEON E3-1505Mv6, 3.0GHz, 4 Slot, 512GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, No OS	0°C up to +60°C
R2U4N1D1C2T0A	RXi2-UP IPC, Quad Core XEON E3-1505Mv6, 3.0GHz, 4 Slot, 512GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10	0°C up to +60°C
R2U2N1C1A1T1A	RXi2-UP IPC, Quad Core XEON E3-1505Lv6, 2.2GHz, 2 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10, RAID	0°C up to +60°C
R2U4N1D1A2T1A	RXi2-UP IPC, Quad Core XEON E3-1505Mv6, 3.0GHz, 4 Slot, 128GB SSD, 32GB DDR4 ECC, 2xRS232, 2xRS422/485, 5xRJ45, Windows 10, RAID	0°C up to +60°C

Pre-Loaded Software Devices

Part Number	Description	Operating Temperature
R2U2N1D3B1T1F	RXi2-UP Industrial PC: Intel® E3-1505Mv6 CPU, 32GB RAM, 256GB SSD, RAID, 2 PCIe Slots, No Drives, -40 to 70C, Windows, Movicon.Next, Alarm Dispatcher, Web Client, PRO.LEAN, 20000 Tags	-40°C up to +70°C