PACSystems™ IPC 2010

Compact Industrial PC

Emerson's PACSystems IPC 2010 Industrial PC (IPC) delivers high-efficiency computing performance and graphics capabilities in our most compact, ruggedized package. Like other award winning products in the PACSystems IPC product line, the IPC 2010 offers customers high reliability and a long deployment life thanks to fanless cooling and soldered memory.

The IPC 2010 computing platform, which includes industrial-grade microprocessor, memory and operating system paired with pre-loaded, pre-licensed edge software, enables customized data collection and aggregation, data protocol conversion, and basic analytics applications for real-time optimization and visualization of operations.

This high-efficiency IPC is well suited to processing time-series data from various sources like PLC's, cameras, sensors, flow meters or valve manifolds, powering analytical solutions for remote monitoring, leak detection, and preventative maintenance applications.

The IPC 2010 comes with everything you need to start creating ROI out-of-the box. An IIoT-ready Linux operating system and PACEdge application enablement platform come pre-installed from the factory. In addition, there are options to add pre-loaded and pre-licensed Movicon® Connext and Movicon WebHMI software, enabling additional functionality and benefits as detailed in the following table.

Software Options and Benefits

Product Name	Functionality and Benefits
PACEdge	An application enablement platform for the development of scalable data intensive Industry 4.0 solutions. It provides integration between OT and IT domains without disrupting OT assets, architectures or systems while satisfying IT cybersecurity, communications and application requirements. PACEdge is capable of supporting integrations and architectures ranging from IIoT gateways and remote monitoring to edge AI/ML analytics and data visualization. The PACEdge software environment provides all the tools necessary to collect, store, process, share, visualize, secure and integrate data allowing users to focus on applications and solutions instead of tools and platforms
PACEdge with Movicon Connext	A gateway communications center for Machine to Machine, Cloud and IIoT connectivity systems that facilitates data collection, analysis, and reporting. Connext quickly and intuitively links a multitude of devices for better data flow. With its built-in protocol libraries, Connext can collect and publish data to the cloud, manage information flows to business systems, or connect field devices to software applications or to each other effortlessly and safely.
PACEdge with Movicon Connext and WebHMI	A comprehensive solution for delivering visualization and data collection that also maintains a seamless, intuitive experience. Whether users are accessing critical data directly in the plant, collecting information via a workstation in a control room, or checking system performance via mobile device from outside the facility, powerful visualization tools ensure a consistent display for fast delivery and interpretation of critical data

For more information:
www.Emerson.com/PACSystems

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Technical Specifications

Item	Specification
Processor	ARM Cortex-A53 CPU (2 or 4 Cores at 1.2 GHz)
Memory	Up to 4 GB DDR4-1600
Ethernet	Two 10/100/1000BASE-T Ethernet ports
Graphics Interface	One DisplayPort via USB-C connector (with integrated cable retention) Part Number YLB-UIPC-01-1
USB Interface	Two USB 2.0
Serial Communications	One RS-232
Internal Storage	eMMC 64 GB
Removeable Storage	One Miro SD Card Slot (SDXC type supported)

Dimension and Weight

Item	Specification
Dimensions	120 x 45 x 101 mm
Weight	340 g

Mounting

Integrated DIN Rail

Power

Item	Specification
Input	10 V – 30 V DC
Backup	CR2032 lithium coin battery

Environmental

Thermal performance is highly dependent on end application workload, pre-configured processor TDP value, installed expansion cards, IPC mounting orientation etc., Please consult User Manual for details and recommendations.

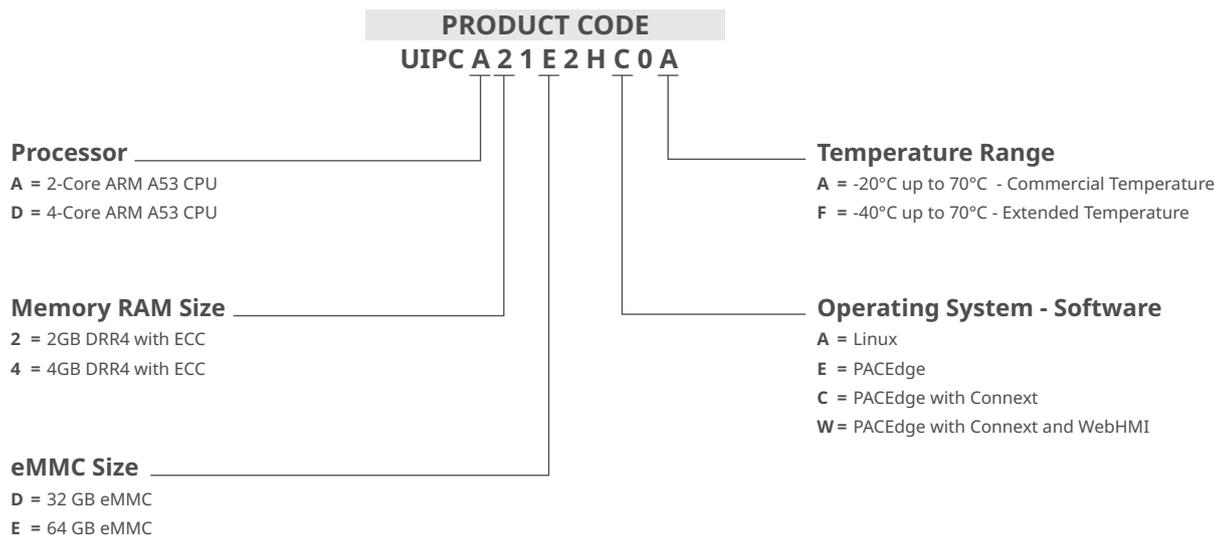| Range	Operating	Storage
Standard	-20 °C up to +70 °C	-40°C up to +85 °C
Humidity	5-95% @ +40 °C	5-95% @ +40 °C
Altitude	6,600 ft. (2.0 km)	40000 ft. (12 km)

Software Support

Linux
PACEdge v2.3.0 (based on Linux Server)
PACEdge with Optional Movicon Connext (pre-loaded options available)
PACEdge with Optional Movicon Connext & WebHMI (pre-loaded options available)

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EMC and Safety

Item	Specification
EMC	EMC Directive 2014/30/EU
	EN 61000-6-4 Emission standard for industrial environments
	EN 61000-6-2 Immunity standard for industrial environments
	FCC Part 15 B
	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
	CAN ICES-3 (A)/NMB-3(A)
Product Safety	LVD Directive 2014/35/EU: EN/IEC 62368-1
	UL 62368-1 -1

Understanding Part Numbers

PRODUCT CODE

UIPC A 2 1 E 2 H C 0 A

Processor
A = 2-Core ARM A53 CPU
D = 4-Core ARM A53 CPU

Memory RAM Size
2 = 2GB DRR4 with ECC
4 = 4GB DRR4 with ECC

eMMC Size
D = 32 GB eMMC
E = 64 GB eMMC

Temperature Range
A = -20°C up to 70°C - Commercial Temperature
F = -40°C up to 70°C - Extended Temperature

Operating System - Software
A = Linux
E = PACEdge
C = PACEdge with Connext
W = PACEdge with Connext and WebHMI

Example: UIPC A 2 1 E 2 H C 0 A

PACSystems IPC 2010 2-Core ARM A53 CPU, 2GB DRR4 with ECC, 64 GB eMMC,
PACEdge with Connext, -20°C up to 70°C - Commercial Temperature

Ordering Information

Part Number	Product	Product Description
UIPCA21E2HE0A	PACSystems IPC 2010 w/ PACEdge	An industrial PC with an ARM Cortex-A53 dual-core 1.2 GHz processor, 2 GB RAM, 64 G SSD, -20 °C to 70 °C operating temperature range, integral DIN rail mounting, Linux operating system and pre-loaded, pre-licensed PACEdge software.
UIPCA21E2HC0A	PACSystems IPC 2010 w/ PACEdge and Movicon Connext	An industrial PC with an ARM Cortex-A53 dual-core 1.2 GHz processor, 2 GB RAM, 64 G SSD, -20 °C to 70 °C operating temperature range, integral DIN rail mounting, Linux operating system and pre-loaded, pre-licensed PACEdge software. Includes a pre-loaded Movicon Connext software license with the Automation Driver Pack, Basic Driver Pack and 2000 OPC UA Tags.
UIPCA21E2HW0A	PACSystems IPC 2010 w/ PACEdge, Movicon Connext and Movicon WebHMI	An industrial PC with an ARM Cortex-A53 dual-core 1.2 GHz processor, 2 GB RAM, 64 G SSD, -20 °C to 70 °C operating temperature range, integral DIN rail mounting, Linux operating system and pre-loaded, pre-licensed PACEdge software. Includes a pre-loaded Movicon Connext software license with the Automation Driver Pack, Basic Driver Pack, 2000 OPC UA Tags and Movicon WebHMI
UIPCD41E2HE0A	PACSystems IPC 2010, quad-core w/ PACEdge	An industrial PC with an ARM Cortex-A53 quad-core 1.2 GHz processor, 4 GB RAM, 64 G SSD, -20 °C to 70 °C operating temperature range, integral DIN rail mounting, Linux operating system and pre-loaded, pre-licensed PACEdge software.
UIPCD41E2HC0A	PACSystems IPC 2010, quad core w/ PACEdge and Movicon Connext	An industrial PC with an ARM Cortex-A53 quad-core 1.2 GHz processor, 4 GB RAM, 64 G SSD, -20 °C to 70 °C operating temperature range, integral DIN rail mounting, Linux operating system and pre-loaded, pre-licensed PACEdge software. Includes a pre-loaded Movicon Connext software license with the Automation Driver Pack, Basic Driver Pack and 2000 OPC UA Tags.
UIPCD41E2HW0A	PACSystems IPC 2010, quad-core w/ PACEdge, Movicon Connext and Movicon WebHMI	An industrial PC with an ARM Cortex-A53 quad-core 1.2 GHz processor, 4 GB RAM, 64 G SSD, -20 °C to 70 °C operating temperature range, integral DIN rail mounting, Linux operating system and pre-loaded, pre-licensed PACEdge software. Includes a pre-loaded Movicon Connext software license with the Automation Driver Pack, Basic Driver Pack, 2000 OPC UA Tags and Movicon WebHMI processor, 4GB RAM, 64GB SSD, -20C to 70C temp range & Integral DIN Mounting.
YLB-UIPC-01-1	PACSystems USB-C to DisplayPort Cable	For graphics interface with PACSystem IPC 2010 Industrial PC

Wi-Fi / Cellular Kits

Part Number	Product	Product Description
UIPC-WMC-4G-GB	PACSystems IPC 2010 Wi-Fi / Cellular Kit - Global	Global Communications Version (4G – GSM+LTE & Wi-Fi), Router RUT241, 4-Pin Power Adapter with I/O Access, 2x Mobile antennas (swivel, SMA male) 1x Wi-Fi antenna (swivel, RP-SMA male), Ethernet cable (0.25 m), SIM Card Kit, IPC 2010 Mounting Clip, Quick Start Guide.
UIPC-WMC-4G-NA	PACSystems IPC 2010 Wi-Fi / Cellular Kit – North America	North American Communications Version (4G -GSM+LTE & Wi-Fi), Router RUT241, 4-Pin Power Adapter with I/O Access, 2x Mobile antennas (swivel, SMA male) 1x Wi-Fi antenna (swivel, RP-SMA male), Ethernet cable (0.25 m), SIM Card Kit, IPC 2010 Mounting Clip, Quick Start Guide.

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