

CoreIPC

CoreIPC-RK100

1U Rackmount Industrial Computer Datasheet

19-inch Rackmount | Multi-Platform | Flexible Storage & Expansion

Document	Datasheet
Model	CoreIPC-RK100
Issue	1.0
Product Type	1U Rackmount Industrial Computer
Website	www.CoreIPC.com

This datasheet is prepared based on CoreIPC-RK100 User Manual Issue 1.0.

1. Product Overview

The CoreIPC-RK100 is a compact 1U rackmount industrial computer designed for standard 19-inch server cabinets. It supports Intel® Celeron®, Intel® Core™ and Intel® LGA socket processor platforms, providing flexible performance options for industrial automation, edge computing, Industrial IoT, intelligent control, network security and OEM/ODM projects.

2. Key Features

- Standard 1U rackmount chassis for 19-inch server cabinets.
- Supports Intel® Celeron®, Intel® Core™ and Intel® LGA1151 / LGA1700 socket processor platforms.
- DDR3L / DDR4 memory support, 4 GB to 64 GB depending on CPU platform.
- HDMI + VGA dual display output.
- Dual Gigabit Ethernet; Intel® i226-V or Realtek RTL8111H controller options; Wake-on-LAN / PXE support.
- 2 x USB 3.0 rear + 2 x USB 2.0 front.
- Flexible SATA, mSATA and M.2 storage options.
- Optional Wi-Fi / Bluetooth, 4G and 5G expansion.
- FSP 1U industrial power supply, AC 100-240 V input, output power < 300 W.
- 482 x 250 x 44.5 mm including rack ears; active cooling; galvanized steel chassis.

3. Technical Specifications

Category	Specification
Chassis	1U rackmount, galvanized steel, black, active cooling
Dimensions	482 x 250 x 44.5 mm (including rack ears)
CPU Support	Intel® Celeron®, Intel® Core™ and Intel® LGA socket processor platforms
Memory	DDR3L / DDR4, 4 GB-64 GB depending on CPU platform
Display	1 x HDMI + 1 x VGA
LAN	Dual Gigabit Ethernet; optional Intel® i226-V or Realtek RTL8111H controllers; Wake-on-LAN / PXE support
USB	2 x USB 3.0 rear + 2 x USB 2.0 front
Audio	1 x Line-out + 1 x MIC
SATA Storage	Optional 1 TB SATA HDD
mSATA Storage	Optional 1 x mSATA 128 GB 2280 SSD (as listed in source manual)
M.2 Key-M Storage	Optional 1 x M.2 128 GB 2280 SSD; NVMe / SATA protocol support
Wireless Expansion	M.2 Key-E Wi-Fi/BT; M.2 Key-B 5G; Mini-PCIe 4G
Operating System	Windows 10 / Windows 11 / Linux
Watchdog	Hardware watchdog timer supported
Power Supply	FSP 1U industrial power supply
AC Input	AC 100-240 V
Output Power	< 300 W
Operating Temperature	0°C to 50°C
Storage Temperature	0°C to 70°C
Relative Humidity	5%-95% RH, non-condensing
Operating Vibration	0.5 g rms / 5-500 Hz / random / operating

4. I/O Interface Summary

4.1 Front I/O

Interface	Description
Power Switch	1 x Power switch button
Reset	1 x Reset button
LED	1 x Blue power LED + 1 x Red HDD LED
USB	2 x USB 2.0
Form Factor	1U rackmount front panel

4.2 Rear I/O

Interface	Description
Display	1 x VGA + 1 x HDMI
LAN	Dual Gigabit Ethernet; Intel® i226-V / Realtek RTL8111H options
USB	2 x USB 3.0
Audio	1 x Line-out + 1 x MIC
Power	AC 100-240 V via FSP 1U industrial PSU

5. Processor and Platform Options

RK100 supports multiple platform families ranging from Intel® Celeron® J1900 / J4125 / J6412 / N5095 / N100 / N150 / N97, through mobile Intel® Core™ platforms, to LGA1151 and LGA1700 socket processors.

Platform Family	Source-listed Processor Options
Intel® Celeron® / N-series	J1900 / J4125 / J6412 / N5095 / N100 / N150 / N97
Intel® Core™ Mobile	i5-3217U / 4200U / 5200U / 6200U / 7200U / 8250U / 8265U / 10210U / 1135G7 / 12450H / 1235U / 1335U / 1340P
LGA1151	i5-6400 / i5-7400 / i5-8400 / i5-9400
LGA1700	i5-12400 / i7-12700 / i5-13400 / i5-14400

6. Storage, Network and Expansion Configuration

Function	Description
SATA	Optional 1 TB SATA HDD
mSATA	Optional 1 x mSATA 128 GB 2280 SSD (source wording)
M.2 Key-M	Optional 1 x M.2 128 GB 2280 SSD; NVMe / SATA supported
M.2 Key-E	Optional Wi-Fi / Bluetooth module
M.2 Key-B / Mini-PCIe	Optional 5G / 4G modules
Network Features	Wake-on-LAN and PXE boot support

7. Power, Cooling and Reliability Functions

Item	Description
Cooling	Active cooling design
Power Supply	FSP 1U industrial power supply
Input Voltage	AC 100-240 V
Output Power	< 300 W
Watchdog	Hardware watchdog timer supported
Chassis Material	Galvanized steel

8. Mechanical and Environmental Information

Item	Description
Dimensions	482 x 250 x 44.5 mm including rack ears
Mounting	1U rackmount, standard 19-inch cabinet
Operating Temperature	0°C to 50°C
Storage Temperature	0°C to 70°C
Relative Humidity	5%-95% RH, non-condensing
Operating Vibration	0.5 g rms / 5-500 Hz / random / operating

9. Ordering Information

Item	Available Options
Processor	Celeron® / N-series, mobile Core™, LGA1151 and LGA1700 options
Memory	DDR3L / DDR4, 4 GB-64 GB, platform-dependent
Storage	SATA HDD / mSATA SSD / M.2 Key-M 2280 SSD
Network	Dual Gigabit Ethernet; Intel® i226-V or Realtek RTL8111H
Wireless	Wi-Fi / Bluetooth / 4G / 5G
Operating System	Windows 10 / Windows 11 / Linux

10. Compliance and Documentation Notes

- Certification and compliance information is not specified in the source manual. Contact CoreIPC for project-specific certification or compliance documentation.
- The chassis supports CoreIPC ITX-series industrial motherboards and can be configured with different processor, memory, storage, network and wireless options according to project requirements.
- Source-listed expansion options include M.2 Key-E Wi-Fi/BT, M.2 Key-B 5G and Mini-PCIe 4G modules. Storage options include SATA HDD, mSATA SSD and M.2 Key-M 2280 SSD.

11. Contact Information

Company	CoreIPC
Sales Team	CoreIPC Sales Team
Email	sales@coreipc.com
Website	https://www.coreipc.com/

Disclaimer: This datasheet was compiled from CoreIPC-RK100 User Manual Issue 1.0. Processor platform, memory, storage, network controller and expansion options vary by selected configuration. Please confirm the final configuration before order placement.