



W4U-IRP-S 4U Rack IPC Server with 12th/13th/14th Gen Intel(R) Core(TM) Processors

Manufacturer part number: W4U-IRP-S | Rack Server



Winmate W4U-IRP-S 4U IPC Server supports Intel 12th-14th Gen Core CPUs, 128GB DDR5, a 300W GPU, and flexible expansion for Edge AI and machine vision.

System Specification	
Processor	Intel(R) Core(TM) i7 processor 14700 (up to 5.40 GHz) (Default), Intel(R) socket 1700 for 14th/ 13th/12th Gen Intel(R) Core(TM) i9/ i7/ i5/ i3 processors, Supports up to 125W TDP
Chipset	Intel(R) R680E
Memory	2 x U-DIMM, DDR5 5600 MHz, 32GB (16GB per DIMM) (Default), 4 x U-DIMM, DDR5 5600 MHz, max. 128GB(Max. 32GB per DIMM)
Storage	256GB SSD (Default), 512GB SSD (Optional), 1TB (Optional), 2TB (Optional), 4TB (Optional), 7 x SATA III for 2.5" SSD/HDD up to 8TB (Supports RAID 0,1,5,10) (Optional)
Ethernet controller	3 x Intel(R) 2.5 Gigabit Ethernet Controller
Security	1 x Internal SPI TPM header
Operating System	Windows 11 IoT Enterprise (64 bit) (Optional), Windows 10 IoT Enterprise (64 bit) (Optional), Windows 11 Pro 64 bit (Optional), Linux Ubuntu 24.04 (Optional)
WLAN	Support (Optional)
BT	Support (Optional)
Sensors	Chassis Intrusion Detection
Expansion Port	1 x M.2 2230 E-Key Slot (for Wi-Fi module), 1 x PCIe 5.0 x16 Slot (x16 mode.When PCIe 5.0 x8 slot being used, this slot will change to x8 mode), 1 x PCIe 5.0 x 8 Slot (x8 mode), 1 x PCIe 4.0 x4 Slot (x4 mode), 1 x PCIe 4.0 x4 Slot (x4 mode), 1 x PCIe 3.0 x4 Slot (x4 mode), 2 x PCI
Graphic Card	NVIDIA RTX A1000 Graphic Card (Optional), NVIDIA RTX A2000E 12 GB Graphic Card (Optional), NVIDIA RTX 2000E Ada Graphic Card (Optional), NVIDIA RTX PRO 2000 BlackwellGraphic Card (Optional), NVIDIA RTX PRO 4000 Blackwell SFF Graphic Card (Optional), NVIDIA RTX 4000E Ada Graphic Card (Optional), NVIDIA RTX A4000E Graphic Card (Optional), NVIDIA RTX PRO 4000 Blackwell Graphic Card (Optional), NVIDIA RTX PRO 4500 BlackWell 32GB Graphic Card (Optional), NVIDIA RTX PRO 5000 BlackWell 48GB /72GB Graphic Card (Optional), NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition (96GB) Graphic Card (Optional), NVIDIA WinFast RTX 5060 HURRICANE 8GB Graphic Card (Optional)
OOB Management	Support Intel(R) AMT and Intel vPro(R) (Varies by CPU SKU)
Mechanical	
Dimension	483 x 177 x 451mm
Weight	35 kg
Mounting	4U Rack mounting
Enclosure	Electroplated steel

Cooling System	Fan Design
Environment	
Operating Humidity	10% to 90% RH, Non-Condensing
Operating Temperature	0 deg C to 50 deg C
Storage Temperature	-10 deg C to 60 deg C
Certification	
Certification	CE, FCC
IO Ports	
USB Port	Front side 2 x USB2.0 (Type-A), Rear side : 6 x USB3.2 Gen2: (Type- A)
Serial Port	Rear side: 1 x RS232/422/485 (Default RS232)
LAN	3 x 2.5GbE RJ45 Connector
Video	1 x DisplayPort 1.4 output. Maximum, resolution of 4096 x 2160 @ 60 Hz, 1 x HDMI 2.1 output. Maximum, resolution of 4096 x 2160 @ 30 Hz, 1 x VGA output.Maximum, resolution of 1920 x 1200 @ 60 Hz
Audio	Mic in, Line in, Line out
Expansion Port	1 x M.2 2230 E-Key Slot (for Wi-Fi module), 1 x PCIe 5.0 x16 Slot (x16 mode.When PCIe 5.0 x8 slot being used, this slot will change to x8 mode), 1 x PCIe 5.0 x 8 Slot (x8 mode), 1 x PCIe 4.0 x4 Slot (x4 mode), 1 x PCIe 4.0 x4 Slot (x4 mode), 1 x PCIe 3.0 x4 Slot (x4 mode), 2 x PCI
Indicator	1 x LED Indicator for power, 1 x LED Indicator for storage
Power Input	VAC 90-264, 500W, ATX P/S, 80 PLUS(R) Bronze (Default), VAC 90-264, 650W~850W, ATX P/S, 80 PLUS(R) Gold (Without GPU) (Optional), VAC 90-264, 850W/1300W, ATX P/S, 80 PLUS(R) Gold (With GPU) (Optional)
Drive Bay	1 x Hot-swap RAID BOX for SATAIII/SATAII or NVMe (Optional), 1 x 3.5 (Optional), 1 x 24X Slim DVD (Optional)
Internal connector	2 x Headers Support Additional 4 x USB3.2 Gen1, 2 x Headers Support Additional 2 x USB2.0 , 5 x COM Headers (1 x RS232/422/485,4 x RS232)
Control	
Button	1 x Front side Power Switch, 1 x Rear side Power Switch(power input control)
Accessory	
Accessory	Power Cord, Quick Start Guide