

W22IAD7T-GPA3

21.5" Edge AI Panel PC with Intel® Alder Lake S / Raptor Lake S Processor



KEY FEATURES

- 21.5", 1920 x 1080 resolution with P-CAP touchscreen
- Supports Intel® 12/14th generation Alder Lake S / Raptor Lake S processor
- Supports single NVIDIA RTX™ A2000/ T1000 GPU
- Supports Intel® vPro
- Up to 2 x 262pin SODIMM DDR5 4800MHz up to 64GB(32GB per Slot)
- 2 x Intel 2.5 Gigabit LAN, 4 x USB3.2 Gen 2x1
- Supports Two display, 1 x HDMI 2.0, 1 x DP 1.4a
- 80 ~ 264 VAC Power Input with 3 Pin AC Plug

INTRODUCTION

Winmate Edge AI Panel PC Series delivers high-performance computing and advanced AI capabilities, designed for demanding applications in factory automation, AIoT, and professional visualization. Available in sizes from 19" to 32", these PCs feature Intel® 12th/14th Gen processors, NVIDIA RTX™ A2000/T1000 GPUs, and up to 64GB DDR5 RAM. With multi-touch P-CAP screens, dual 2.5 Gigabit LAN for fast connectivity, and dual display support via HDMI and DP, this series ensures seamless data processing and visualization. Built with durability and efficiency, it's ideal for AI-driven workflows and real-time data analysis.

OVERVIEW

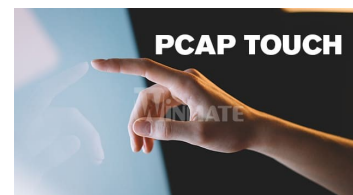


Cutting-edge Intel Platform

Winmate's AI panel PC support with an advanced Intel vPro platform. This innovative panel PC seamlessly combines powerful capabilities, integrating AI-driven security functionalities supported by Intel® Threat Detection Technology to detect threats efficiently. With Winmate's AI panel PC, users can enjoy a seamless blend of advanced security measures and enhanced productivity, setting a new standard in computing excellence.

Effortless Engagement with P-Cap Touch

With the glass cover lens, the device gains robust protection against scratches. P-Cap Touch facilitates intuitive 4-point multi-touch operation via finger control, enhancing the pleasure of every interaction and simplifying device usage. It contributes significantly to elevating the overall customer experience.





NVIDIA GPU Empowered AI Analysis

The AI panel pc from Winmate utilizes the new NVIDIA T1000 graphics cards to deliver the expected performance, features, and reliability of NVIDIA professional visualization solutions in a compact yet powerful form factor. Additionally, the AI panel PC adopts A2000 graphics cards as well, optimized for professional tasks like 3D rendering and video editing, with features like real-time ray tracing and AI-enhanced graphics.

Latest DDR5 Memory Card

Winmate's AI Panel PC utilizes the latest DDR5 memory cards. Compared to its predecessors DDR4, DDR5 offers powerful startup speed performance, with an initial transfer rate of 4800MT/s. Moreover, DDR5 has PMIC which can reduce power consumption and increase efficiency, extending the battery life of the AI Panel PC and providing significant advantages to operate around the clock.



High-Speed Connectivity by GigaLAN Port

Equipped with dual 2.5 Gigabit LAN ports, the Winmate AI panel PC facilitates rapid data and image transfers, boasting speeds from 10 to 1000 Mbps. Ideal for factory automation and AIoT applications, it enhances productivity by minimizing latency and optimizing response times, ensuring seamless connectivity for efficient task management.

SPECIFICATIONS

Display			
Resolution	1920x1080	Size	21.5 inches
Contrast Ratio	3000:1	Panel Brightness	250.0 nits
View Angles	89,89,89,89	Active Area	476.64x268.11 mm
Touch / Glass	Projected Capacitive Multi Touch Screen		
System Specification			
Processor	Intel® Core™ i7-12700TE(up to 4.6GHz) Intel® Core™ i9-12900TE(up to 4.80GHz) (Optional) Intel® Core™ i7-14700T(up to 5.2GHz) (Optional) Intel® Core™ i9-14900T(up to 5.5GHz) (Optional)	Chipset	Intel® R680E
Memory	SO-DIMM, DDR5 4800 MHz, 8+8GB 16+16GB (Optional) 32+32GB (Optional)	Storage	1 x M.2 2280 M-Key NVMe SSD, 512GB 1TB (Optional) 2TB (Optional)
Ethernet controller	2 x Intel® 2.5 Gigabit Ethernet Controller	Security	TPM 2.0
Operating System	Windows 11 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64 bit (Optional) Linux Ubuntu 22.04(Do not support Wake on Touch) (Optional)	WLAN	Support (Optional)
BT	Support (Optional)	AI Accelerator	Hailo 8™ AI accelerator module, up to 26 TOPS(When using this feature, WLAN will not be supported) (Optional)
Graphic Card	NVIDIA® RTX A2000 12GB Graphic Card (Optional) NVIDIA® T1000 8GB Graphic Card (Optional)		
Mechanical			
Dimension	530.2 x 321.7 x 70.4 mm	Weight	7.0 kg
Mounting	Panel mount VESA mount (Optional)	Enclosure	Metal Housing
Cooling System	Fan Design	Cut out	473 x 280 mm
Environment			
Operating Humidity	10% to 90% RH, Non-Condensing	Operating Temperature	0°C to 55°C
Storage Temperature	-10°C to 60°C	IP rating	Front IP65
Certification			
Certification	CE, FCC		
IO Ports			
Power Input	1 x 3 Pin AC Plug	USB Port	4 x USB 3.2 Gen2x1 (10Gbps, TypeA)
Video	1 x DP1.4a DP++ , Max resolution up to 4096x2160@60Hz 1 x HDMI 2.0b , Max resolution up to 4096x2160@60Hz (Optional)	Audio	Mic in Line out
Expansion Port	1 x M.2 2280 M-Key Slot (for NVMe SSD) 1 x M.2 2230 E-Key Slot (for Wi-Fi module or Hailo 8™ AI accelerator module) 1 x PCIe 5.0 (x16) slot	LAN	2 x 2.5 Giga LAN RJ45 Connector
Indicator	1 x LED Indicator for power 1 x LED Indicator for storage		
Control			

Button	1 x AC Power Switch 1 x Power Button 1 x Clear CMOS Button 2 x Reset Button
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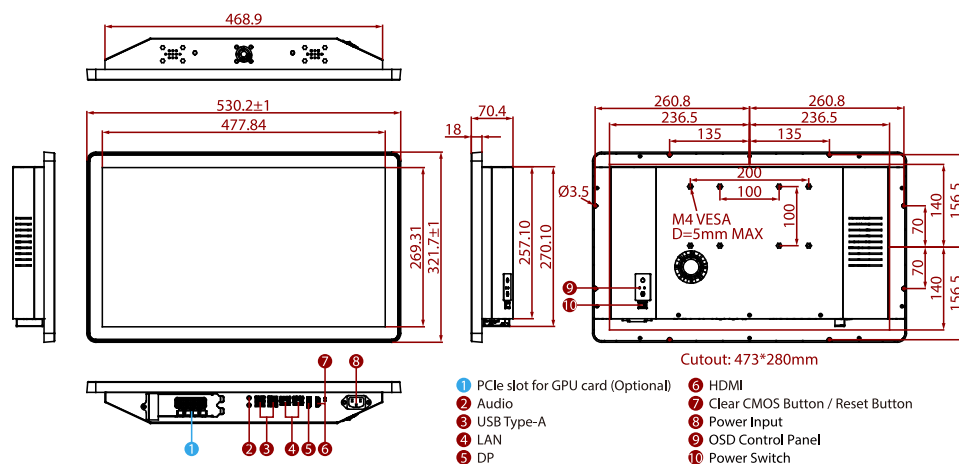
Accessory

Accessory	Power Cord VESA screws Mounting screws
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Power

Power Rating	80 ~ 264VAC	Consumption	300W
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DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing and some components are not marked in detail.
2. Please contact our sales representative if you need further product information.
3. All specifications are subject to change without prior notice.
4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.