

# W22IAD7T-GPA3

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



CE

FCC

## 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™ 2000E Ada / RTX™ A1000 GPU Card
- Supports Intel® vPro
- 2 x SO-DIMM RAM, up to 64GB (32GB per DIMM)
- 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 W22IAD7T-GPA3 is a 21.5-inch Edge AI Panel PC with Intel® Alder Lake S / Raptor Lake S Processor engineered for machine vision, edge AI inference, and industrial automation. It combines 21.5-inch display with 1920x1080 resolution, 21.5", 1920 x 1080 resolution with P-CAP touchscreen, and Supports Intel® 12/14th generation Alder Lake S / Raptor Lake S processor to support reliable operation in harsh industrial environments. With Supports single NVIDIA RTX™ 2000E Ada / RTX™ A1000 GPU Card, the W22IAD7T-GPA3 helps OEMs, system integrators, and project teams deploy durable...

## SPECIFICATIONS

### Display

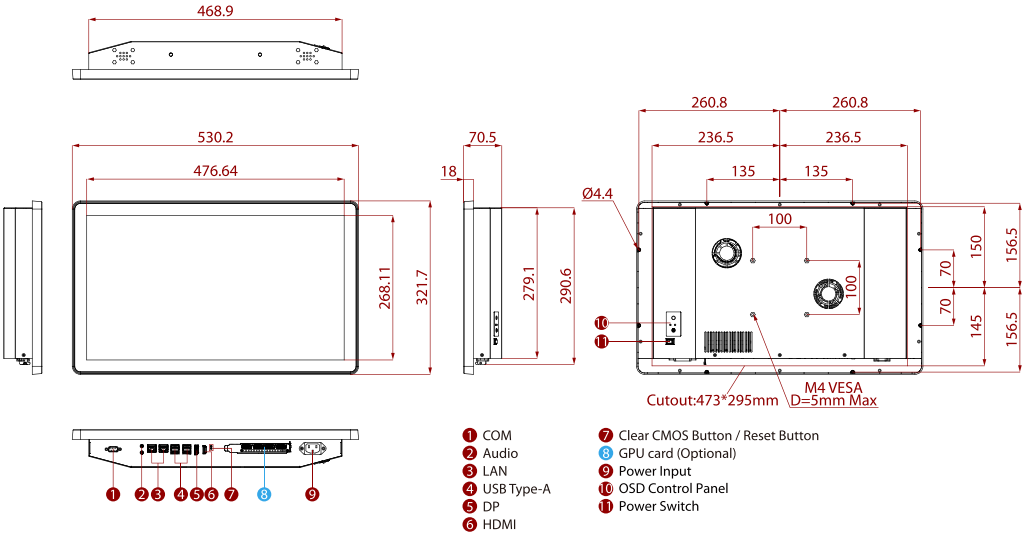
|                       |                                         |                         |                  |
|-----------------------|-----------------------------------------|-------------------------|------------------|
| <b>Resolution</b>     | 1920x1080                               | <b>Size</b>             | 21.5 inches      |
| <b>Contrast Ratio</b> | 3000:1                                  | <b>Panel Brightness</b> | 250.0 nits       |
| <b>View Angles</b>    | 89,89,89,89                             | <b>Active Area</b>      | 476.64x268.11 mm |
| <b>Touch / Glass</b>  | Projected Capacitive Multi Touch Screen |                         |                  |

### System Specification

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WLAN</b>           | Support (Optional)                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>BT</b>           | Support (Optional)                                                                                                                                     |
| <b>AI Accelerator</b> | Hailo 8™ AI accelerator module, up to 26 TOPS(When using this feature, WLAN will not be supported) (Optional)                                                                                                                                                                                                                                                                                                                                        | <b>Graphic Card</b> | NVIDIA® RTX 4000E Ada 20 GB Graphic Card (Optional)<br>NVIDIA® RTX 2000E Ada 16GB Graphic Card (Optional)<br>NVIDIA® A1000 8GB Graphic Card (Optional) |
| <b>Processor</b>      | Intel® Core™ i5-12500TE Processor 18M Cache, up to 4.30 GHz (Default)<br>Intel® Core™ i7-12700TE Processor 25M Cache, up to 4.60 GHz (Optional)<br>Intel® Core™ i9-12900TE Processor 30M Cache, up to 4.80 GHz (Optional)<br>Intel® Core™ i5 processor 14500T 24M Cache, up to 4.80 GHz (Optional)<br>Intel® Core™ i7 processor 14700T 33M Cache, up to 5.20 GHz (Optional)<br>Intel® Core™ i9 processor 14900T 36M Cache, up to 5.50 GHz (Optional) | <b>Chipset</b>      | Intel® R680E                                                                                                                                           |
| <b>Memory</b>         | 2 x non-ECC SO-DIMM RAM, up to 64GB (32GB per DIMM)                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Storage</b>      | 128GB SSD(Default) (Default)<br>256GB SSD (Optional)                                                                                                   |

|                     |                                                                                                                                                  |                                                                                                |                                                                                                                                   |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
|                     |                                                                                                                                                  | 512GB SSD (Optional)<br>1TB (Optional)<br>2TB (Optional)<br>4TB<br>Raid 0,1 support (Optional) |                                                                                                                                   |
| Ethernet controller | 2 x Intel® Ethernet Controller                                                                                                                   | Security                                                                                       | TPM 2.0                                                                                                                           |
| Operating System    | Windows 11 IoT Enterprise (64 bit) (Optional)<br>Windows 11 Pro 64 bit (Optional)<br>Linux Ubuntu 24.04(Do not support Wake on Touch) (Optional) |                                                                                                |                                                                                                                                   |
| Mechanical          |                                                                                                                                                  |                                                                                                |                                                                                                                                   |
| Dimension           | 530.2 x 321.7 x 70.5 mm                                                                                                                          | Weight                                                                                         | 7.0 kg                                                                                                                            |
| Mounting            | Panel mount (Default)<br>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)                                                                                                |
| Serial Port         | 1 x RS232/422/485 (Default RS232)                                                                                                                | Video                                                                                          | 1 x DP1.4a DP++ , Max resolution up to 4096x2160@60Hz (Default)<br>1 x HDMI 2.0b , Max resolution up to 4096x2160@60Hz (Optional) |
| Audio               | Mic in<br>Line out                                                                                                                               | Expansion Port                                                                                 | 1 x M.2 2230 E-Key Slot (for Wi-Fi module )                                                                                       |
| LAN                 | 2 x 2.5 Giga LAN RJ45 Connector                                                                                                                  | Indicator                                                                                      | 1 x LED Indicator for power<br>1 x LED Indicator for storage                                                                      |
| Control             |                                                                                                                                                  |                                                                                                |                                                                                                                                   |
| Button              | 1 x AC Power Switch<br>1 x Power Button<br>1 x Clear CMOS Button<br>1 x Reset Button                                                             |                                                                                                |                                                                                                                                   |
| Accessory           |                                                                                                                                                  |                                                                                                |                                                                                                                                   |
| Accessory           | Power Cord<br>VESA screws<br>Mounting screws                                                                                                     |                                                                                                |                                                                                                                                   |
| Power               |                                                                                                                                                  |                                                                                                |                                                                                                                                   |
| Power Rating        | 80 ~ 264VAC                                                                                                                                      | Consumption                                                                                    | 400W                                                                                                                              |

### 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.