WNAI-E800L

Industrial Edge AI Computer with Intel® Raptor Lake-S processor and NVIDIA® RTX™ GPU



KEY FEATURES

- Supports Intel® 12/14th generation Raptor Lake S processor (LGA 1700)
- Supports single NVIDIA RTX PRO 6000 Blackwell/RTX5090 GPU
- Up to 2 x 262pin SODIMM DDR up to 96GB(48GB per Slot)
- Supports 6 x USB3.2, 3 x Intel 2.5 Gigabit LAN
- Supports Two display, 1 x HDMI 2.0, 1 x DP 1.4a
- Supports Intel® vPro
- Rugged Design, -25°C to 60°C operation

INTRODUCTION

Winmate WNAI-E800L is an Industrial Edge AI Computer with Intel® Raptor Lake-S processor and NVIDIA® RTX™ GPU engineered for machine vision, edge AI inference, and industrial automation. It combines Supports Intel® 12/14th generation Raptor Lake S processor (LGA 1700), Supports single NVIDIA RTX PRO 6000 Blackwell/RTX5090 GPU, and Up to 2 x 262pin SODIMM DDR up to 96GB(48GB per Slot) to support reliable operation in harsh industrial environments.

SPECIFICATIONS

System Specification

Processor	Supporting Intel® 12/14th-Gen Core™ CPU (LGA1700 socket, 65W/45W/35W TDP) Intel® Core™ i7-14700T(up to 5.2GHz) Intel® Core™ i7-12700TE(up to 4.6GHz) (Default) Intel® Core™ i9-12900TE(up to 4.8GHz) (Optional) Intel® Core™ i5-14500T(up to 4.8GHz) (Optional) Intel® Core™ i9-14900T(up to 5.5GHz) (Optional) Intel® Core™ i9-14500(up to 5.0GHz) (Optional) Intel® Core™ i7-14700(up to 5.4GHz) (Optional) Intel® Core™ i9-14900(up to 5.8GHz) (Optional)	**Chipset**	Intel® R680E
Memory	2 x non-ECC SO-DIMM RAM, up to 96GB (48GB per DIMM)	**Storage**	128GB SSD (Default) 256GB SSD (Optional) 512GB SSD (Optional) 1TB (Optional) 2TB (Optional) 4TB 2 x SATA III for 2.5" SSD/HDD up to 2TB(RAID support) (Optional)
Ethernet controller	3 x Intel® 2.5 Gigabit Ethernet Controller	**Security**	TPM 2.0
Operating System	Windows 10 IoT Enterprise (64 bit) (Optional) Windows 11 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64 bit (Optional) Linux Ubuntu 24.04(Do not support Wake on Touch) (Optional)	**WLAN**	Support (Optional)
BT	Support (Optional)	**Graphic Card**	Supports high-end NVIDIA RTX GPUs (e.g., GeForce RTX 5090 or RTX PRO 6000 Blackwell) (Optional) Other GPU options are available upon request. (Optional)

Mechanical

Dimension	400 x 230 x 196 mm	**Weight**	7.85kg
Mounting	Desk mount	**Enclosure**	Metal Housing
Cooling System	Fan Design		

Environment

Operating Humidity	10% to 90% RH, Non-Condensing	**Operating Temperature**	-25°C to 60°C
Storage Temperature	-40°C to 70°C		

Certification

Certification	CE, FCC

IO Ports

Power Input	1 x 3 Pin AC Plug for ATX Power Supply.Max. to 1200W	**USB Port**	6 x USB3.2 Gen 2x1 (Type-A)
Serial Port	2 x RS232/422/485 (Default RS232)	**SIM Card Slot**	1 x nano SIM slot
Video	1 x DP1.4a DP++ , Max resolution up to 4096x2160@60Hz (Default) 1 x HDMI 2.0b , Max resolution up to 4096x2160@60Hz (Optional)	**Audio**	Mic in Line out
Expansion Port	1 x M.2 2230 E-Key Slot (for Wi-Fi module) 1 x M.2 3042/3052 B-Key Slot (for WWAN module) 1 x PCIe x16 slot, 16-lanes, for NVIDIA® RTX™ GPU cards 1 x PCIe x8 slot, 8-lanes (Only available when PCIe x16 signal is not present) 2 x PCIe x8 slot, 4-lanes	**LAN**	3 x 2.5 Giga LAN RJ45 Connector

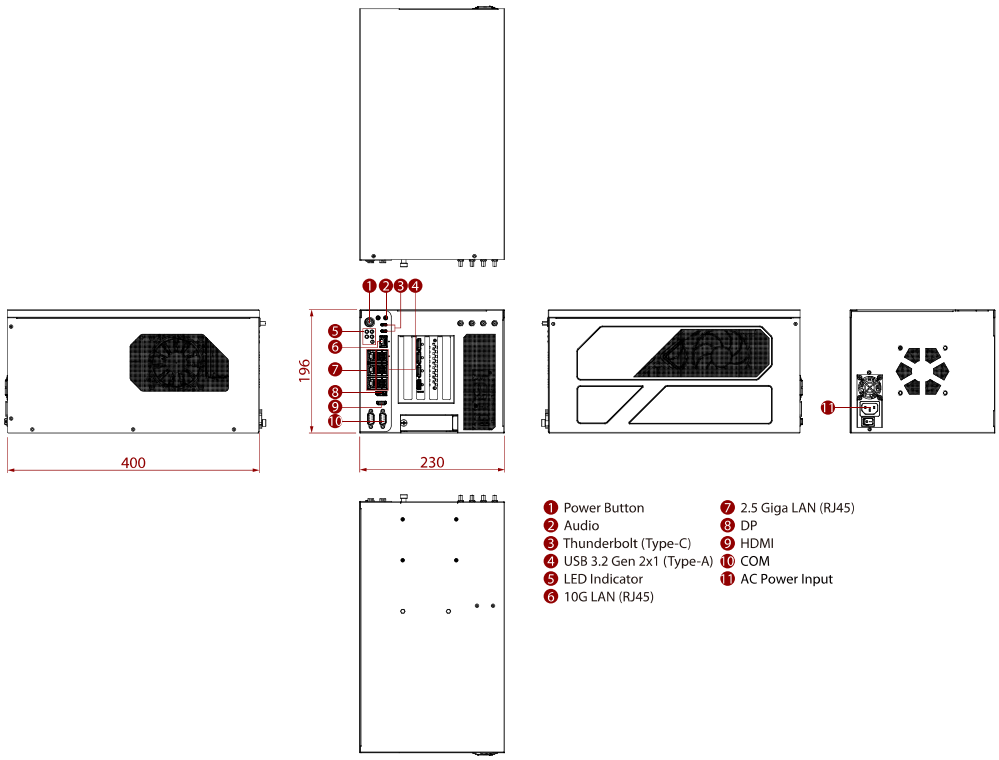
Control

Button	1 x Power Button with LED Indicator 1 x Clear CMOS Button

Accessory

Accessory	Power Cord

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.

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