UNO-258

Edge AI Compact Box PC with Intel® Core™ Ultra Processor



Features

- Intel® Core™ Ultra series 3 processors (Panther Lake H) with 25W TDP support
- Integrated AI acceleration providing up to 180 TOPS total AI performance (120 GPU + 50 NPU + 10 CPU)
- Xe3 GPU architecture providing up to 2× the graphics performance compared to Arrow Lake-H
- Dual-channel DDR5 SO-DIMM memory supporting up to 128GB (64GB per channel)
- M.2 E-Key, B-Key, M-Key (supports NVMe) expansion for storage, LTE/5G, and Wi-Fi
- Built-in 1000Mbps & 2500Mbps LAN ports with TCC and TSN support
- Modular I/O board design offering dual LAN or isolated DIO/CANBUS/COM

Specifications

General

- **Certification** CE, FCC Class A, UL, CCC, BSMI
- **Dimensions (W x D x H)** 160 x 160 x 60 mm (6.30 x 6.30 x 2.36 in)
- **Form Factor** Compact Box PC
- **Enclosure** Aluminum housing
- **Mount Options** Stand, Wall mount, DIN-rail (Optional)
- **Weight (Net)** 2.5kg (5.5lb)
- **Power Requirement** 12-24V_{DC}
- **Power Consumption** 55W (Typical)
- **OS Support** Windows 11 LTSC, Ubuntu 24.04

System Hardware

- **BIOS** AMI EFI (256 Mbit)
- **Watchdog Timer** Programmable timer with 255 intervals (1 ~ 255 sec)
- **TPM** TPM 2.0
- **Processor** Intel® Core™ Ultra X7 358H (16 cores), up to 4.8 GHz
  Intel® Core™ Ultra 5 325 (8 cores), up to 4.5 GHz
- **Memory** U7: 2 slots for DDR5 7200 (up to 64GB max per slot)
  U5: 2 slots for DDR5 6400 (up to 64GB max per slot)
- **Graphics Engine** Intel® ARC Graphics (Xe3)
- **Ethernet** LAN A: Intel® i219-LM 1Gb/s, IEEE 802.3, 802.1as/1588
  LAN B/C: Intel® i226-V, 2.5Gb/s, IEEE 802.3, 802.1as/1588
  LAN D/E (optional): Intel® i226-V, 2.5Gb/s, IEEE 802.3, 802.1as/1588
- **LED Indicators** Power, RTC Battery low, NVMe, Run
- **Storage** 1 x M.2 M-key 2280 (PCIe x4, Gen 5 NVMe)
- **Expansion** 1 x M.2 B-key 3052/3042 (USB 3.2, Gen 2)
  1 x M.2 E-key 2230 (PCIe x1)
  1 x M.2 M-key 2280 (PCIe x4, Gen 5 NVMe, share with storage)
- **SIM Slot** Yes (1 x Nano size)

Front I/O

- **Display** 1 x HDMI 1.4 (up to 4096 x 2160 @30Hz)
- **Ethernet** LAN A: Intel® i219-LM
  LAN B/C: Intel® i226-V
- **USB** Type-A: 2 x USB 2.0, 3 x USB 3.2 (GEN 2)
  Type-C: 1 x USB 3.2 Gen 2, supports DisplayPort 1.4 Alt. Mode (3840x2160@60Hz)
- **Power connector** 1 x 2-Pin Terminal block

Rear I/O - LAN version

- **Ethernet** LAN D/E: Intel® i226-V
- **Serial Ports** 2 x RS-232/422/485, 50kbps ~ 115.2kbps
- **GPIO** GPIO x 8 bit
- **CANbus** 2 x CAN 2.0

Rear I/O – Isolated version

- **Serial Ports** 2 x RS-232/422/485 (Isolated, 50kops ~ 115.2kbps)
- **CANbus** 2 x CAN 2.0 (Isolated, 2500 V_{DC})
- **DI/O** 4 x Digital input channels with 2500 V_{DC} isolation protection
  - Wet contact: Logic 0: 10 ~ 30 V_{DC}/ Logic 1: 0 ~ 3 V_{DC}
  - Dry contact: Logic 0: Shorted to GND/ Logic 1: Open
  4 x Digital output channels
  - Output voltage: 5 ~ 30 V_{DC}
  - Output capability sink: 500 mA max./channel

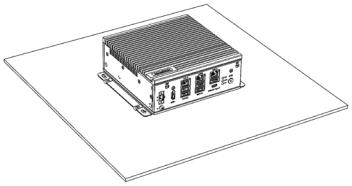
Environment

- **Operating Temperature** -20 ~ 60°C (-4 ~ 122°F) with 0.7 m/s airflow
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** Operating, 95% RH @ 40°C, non-condensing
  Non-operating, 95%RH @ 60°C, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- **Vibration Protection** Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis
- **Ingress Protection** IP30

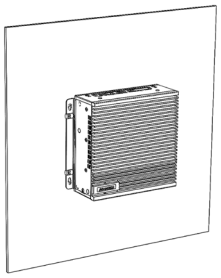
All product specifications are subject to change without notice.

Installation Scenario

Stand/Wall Mount

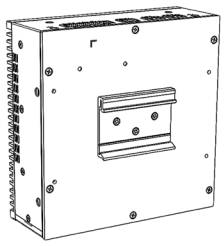


Stand Mount

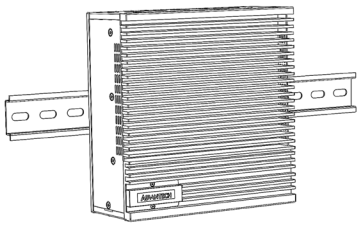


Wall Mount

DIN-Rail Mount (Optional)



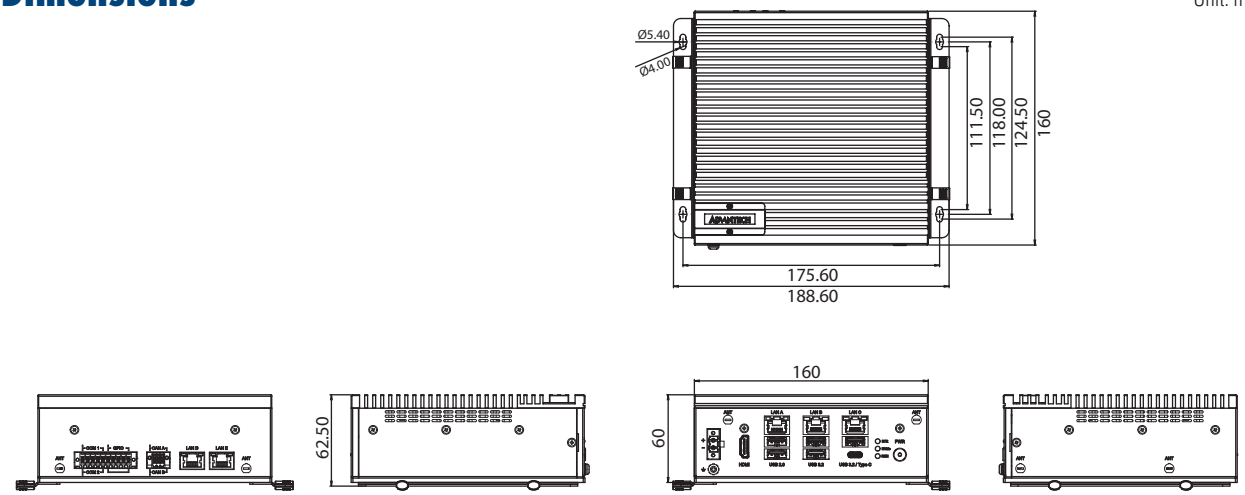
DIN-Rail Assembly



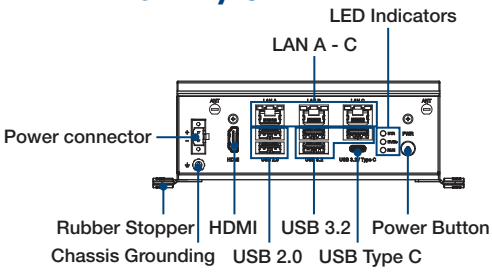
DIN-Rail Installation

Dimensions

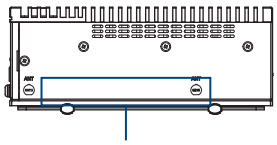
Unit: mm



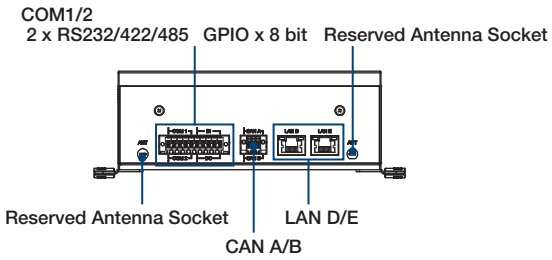
Front I/O



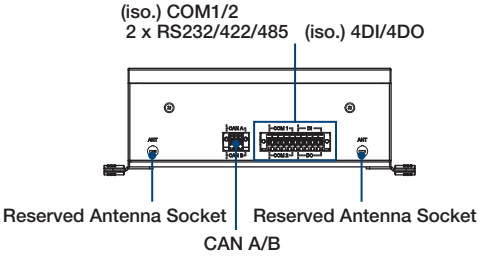
Right I/O



Rear I/O - LAN



Rear I/O - ISO.



Ordering Information

Model	Ordering Part Number	CPU	LAN	COM	DIO	USB Type A
UNO-258	UNO-258-U37NIA	U7-358H	3	2 (Iso.)	4DI/4DO (Iso.)	5
	UNO-258-U37NLA	U7-358H	5	2	GPIO x8 bit	5
	UNO-258-U35NIA	U5-325	3	2 (Iso.)	4DI/4DO (Iso.)	5
	UNO-258-U35NLA	U5-325	5	2	GPIO x8 bit	5

Optional Accessories

- **96PSA-A150W24T2-4** Power Adapter 100-240V 150W 24V
- **1702002600** Power Cable US Plug 1.8 M (Industrial Grade)
- **1702002605** Power Cable EU Plug 1.8 M (Industrial Grade)
- **1702031801-11** Power Cable UK Plug 1.8 M (Industrial Grade)
- **1700000596-11** Power Cable China/Australia Plug 1.8 M (Industrial Grade)
- **UNO-200-DMKBE** UNO-200 series DIN-rail kit
- **1990021846N020** Thermal pad for 2nd RAM
- **1990041183N010** Thermal pad for M.2 E key module
- **1990042901N000** Thermal pad for M.2 B key module