

# IES-21UA

Fanless Embedded Edge System with  
Intel® Meteor Lake

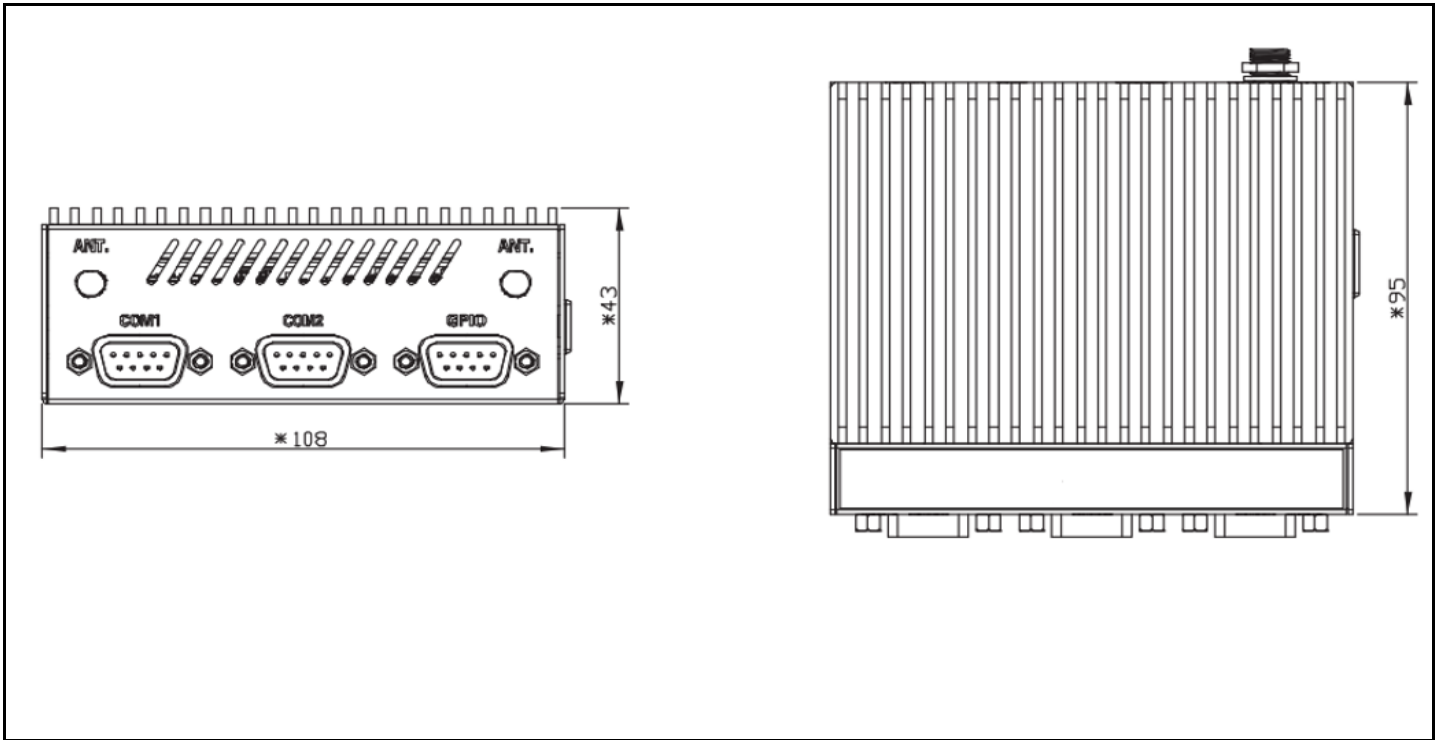


## Features

- Intel® Core™ Ultra 5 Processor SoC
- Onboard LPDDR5, up to 32GB
- 2.5GbE Intel® Ethernet Controller I226 + 1GbE Intel® Ethernet Connection I219
- HDMI 1.4
- M.2 2280 M-Key x 1 (PCIe 4.0 [x4]/SATA)
- M.2 2230 E-Key x 1 (PCIe 4.0 [x1] + USB 2.0)
- USB 3.2 Gen 2 x 2
- RS-232/422/485 x 2 (Optional)
- TPM, GPIO 4-bit (Optional)

## Specifications

System		EXTERNAL I/O	
CPU	Intel® Core™ Ultra 5 Processor 125U (2PC+10EC/14T, P core 1.30 GHz, E core 0.80 GHz, 15W)	Ethernet	Intel® Ethernet Controller I226, 2.5GbE, RJ 45 x 1
Chipset	Integrated with Intel® SoC	USB	USB 3.2 Gen2 x 2
Memory	Single Channel LPDDR5 6400, up to 32GB	Serial Port	COM 1~2 (RS-232/422/485, support 5V/12V/RI, Optional)
BIOS	UEFI	Video	HDMI 1.4 x 1
Wake on LAN	Yes	INTERNAL I/O	
Watchdog Timer	255 Levels	USB	—
Security	TPM2.0	Serial Port	—
RTC Battery	Lithium Battery 3V/240mAh	Video	—
Dimension	4.25" x 3.74" x 1.69" (108mm x 95mm x 43mm)	SATA	—
Gross Weight	1.10 lbs (0.60 kg)	Audio	—
OS support	Windows 10/11 (64 bit) Linux Ubuntu 22.04.2 kernel 5.19.0 32 generic	DIO/GPIO	GPIO 4-bit (Optional)
Power Requirement		SMBus/I2C	—
Power Requirement	+12V	Fan	—
Power Supply Type	ATX	Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Connector	Lockable DC Jack Connector	Others	—
Power Consumption	Intel® Core™ Ultra 5 Processor 125U, LPDDR5 32GB (Micron 3UC47 D8DRX x2), 2.75A @ +12V (Typical) Intel® Core™ Ultra 5 Processor 125U, LPDDR5 32GB (Micron 3UC47 D8DRX x2), 4.95A @ +12V (Max)	EXPANSION	
		M.2	M.2 2280 M-Key x 1 (PCIe 4.0 [x4]/SATA, Default: PCIe [x4], select by BOM) M.2 2230 E-Key x 1 (PCIe 4.0 [x1] + USB 2.0)
		Mini PCI-E/mSATA	—
		Others	—
DISPLAY		EXPANSION	
Controller	Intel® Graphics	Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C) with 0.7m/s air flow
LVDS/eDP	—	Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Display Interface	HDMI 1.4 x 1, 3840 x 2160 @30Hz	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Multiple Display	1 Display	MTBF (hours)	1,063,716
AUDIO		EMC	CE/FCC Class A
CODEC	—		
Audio Interface	—		
Speaker	—		



## Ordering Information

### Packing List

## Optional Accessories

### Part Number / Item

Part Number / Item	