

iBOX Ultra 100 Series  
iBOX-155U, iBOX-125U  
Fanless Embedded BOX PC



## KEY FEATURES

- Intel® Core™ Ultra processors (Meteor Lake-U)
- 2 x 262-pin SO-DIMM DDR5 5600MHz up to 96GB (48GB per DIMM)
- 1 x USB4/Thunderbolt™4, 4 x USB3.2 Gen2, 2 x USB 2.0, 2 x M.2 Key M, 1 x M.2 Key E, 1 x COM, 1 x SATA3
- 2 x Intel 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI 2.1 TMDS, 1 x DP 2.1 (from USB4), 1 x DP 1.4a (from Type-C)
- Intel PTT
- Supports Intel® vPro, VMD RAID 0/1
- 19V/90W Power Adapter
- 171.8 x 109.45 x 50.05mm (6.76" x 4.31" x 1.97"), Fanless Embedded BOX PC

## SPECIFICATIONS

### Processor System

|         |                                                                                                                     |
|---------|---------------------------------------------------------------------------------------------------------------------|
| CPU     | Intel® Core™ Ultra processors (Meteor Lake-U)<br>iBOX-155U (Ultra 7 155U, 2P+8E)<br>iBOX-125U (Ultra 5 125U, 2P+8E) |
| Chipset | MCP                                                                                                                 |
| BIOS    | AMI SPI 256 Mbit                                                                                                    |

### Memory

|            |                            |
|------------|----------------------------|
| Technology | Dual Channel DDR5 5600 MHz |
| Capacity   | 96GB (48GB per DIMM)       |
| Socket     | 2 x 262-pin SO-DIMM        |

### Graphics

|              |                                                                    |
|--------------|--------------------------------------------------------------------|
| Controller   | Intel® Graphics                                                    |
| HDMI         | HDMI 2.1 TMDS<br>Max resolution up to 4096x2160@60Hz               |
| DisplayPort  | DisplayPort 2.1/ 1.4a, DP++<br>Max resolution up to 4096x2160@60Hz |
| MultiDisplay | Quad-Display (Included 2 outputs from Type-C)                      |

### Expansion Slot

|     |                                                                   |
|-----|-------------------------------------------------------------------|
| M.2 | 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless |
|-----|-------------------------------------------------------------------|

### Audio

|           |                                        |
|-----------|----------------------------------------|
| Interface | Realtek ALC256, High Definition Audio. |
|-----------|----------------------------------------|

### Ethernet

|                   |                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------|
| Controller/ Speed | LAN1: Intel I226LM with 10/100/1000/2500 Mbps, supports vPro<br>LAN2: Intel I226V with 10/100/1000/2500 Mbps |
| Connector         | 2 x RJ-45                                                                                                    |

### Storage

|      |                                                                                                         |
|------|---------------------------------------------------------------------------------------------------------|
| M.2  | 1 x M.2 (KEY M, 2242) with PCIe Gen4 x4 for SSD<br>1 x M.2 (KEY M, 2242/2280) with PCIe Gen4 x4 for SSD |
| SATA | 1 x SATA3.0 (6.0 Gb/s)                                                                                  |

### Front I/O

|       |                                                                                                                                                                                                                                              |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USB   | 1 x USB 3.2 Gen2 (Type A)<br>1 x USB4/Thunderbolt™ 4 (5V/3A, Supports DP 2.1 display output)<br>1 x USB3.2 Gen2 x2 (Type-C, 5V/3A, Supports DP1.4a display output)<br>2 x USB 2.0<br>*For Thunderbolt support, please refer to support list. |
| Audio | 1 (headphone & microphone jack)                                                                                                                                                                                                              |

### Rear I/O

|          |                           |
|----------|---------------------------|
| HDMI     | 2 x HDMI 2.1 TMDS         |
| Ethernet | 2 x 2.5 Gigabit LAN       |
| USB      | 2 x USB 3.2 Gen2 (Type-A) |
| DC Jack  | 1                         |
| COM      | 1 x COM(RS-232)           |

### Watchdog Timer

|          |                                  |
|----------|----------------------------------|
| Output   | From Super I/O to drag RESETCON# |
| Interval | 256 Segments, 0, 1, 2, ...255sec |

### Power Requirements

|           |                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Input PWR | 12V~24V DC-In Jack                                                                                                        |
| Power On  | AT/ATX Supported<br>- AT : Directly PWR on as power input ready<br>- ATX : Press button to PWR on after power input ready |

### Environment

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Operating Temp     | -20°C ~ 40°C with air flow 0.5~0.8 m/s<br>(with extended temp. peripherals) |
| Storage Temp       | -40° C ~ 85° C                                                              |
| Operating Humidity | 5% ~ 90%                                                                    |
| Storage Humidity   | 5% ~ 90%                                                                    |

### Mechanical

|                        |                                                  |
|------------------------|--------------------------------------------------|
| Construction           | Aluminum housing                                 |
| Mounting               | VESA mount/Wall mount/Din-rail                   |
| Dimensions (L x W x H) | 171.8 x 109.45 x 50.05mm (6.76" x 4.31" x 1.97") |
| Weight                 | Net Weight:1.6Kg                                 |

### Others

|                |                                                 |
|----------------|-------------------------------------------------|
| OS Support     | Windows 10/11                                   |
| TPM            | Intel® PTT                                      |
| Certifications | CE, FCC                                         |
| Packing List   | 1 x 19V/90W Power Adapter<br>1 x Wall mount kit |

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660