

# TBOX-12F15-4L

New Box PC with Intel Core Ultra 5 125U CPU; 4 GbE,  
4 USB, 2 COM, 1 HDMI; Auto detected DC 12/19/24V  
Power Input; 1\* Mini-PCle & 1\* M.2

Version: 1.0



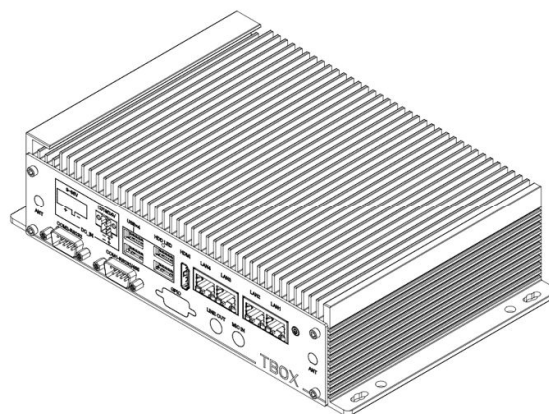
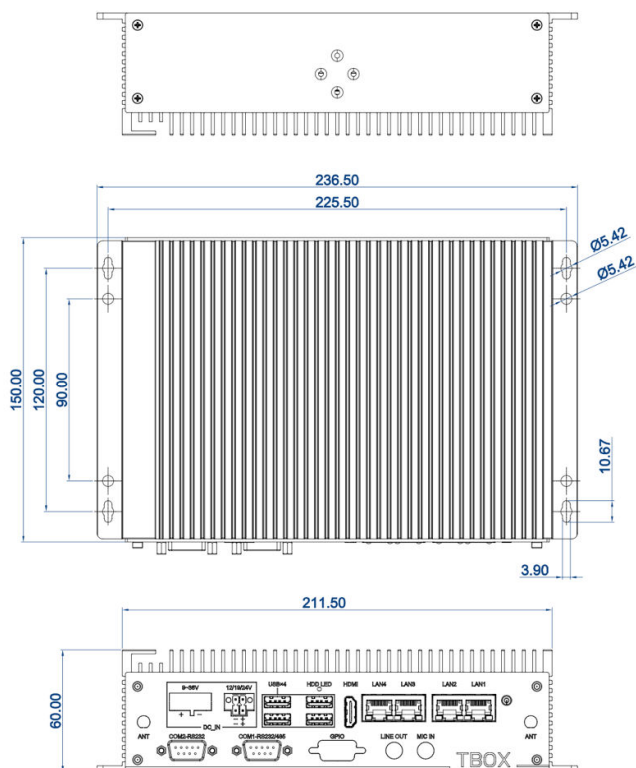
## Features:

- Rugged & compact, fanless designed box structure;
- Support Powerful Intel Core™ Ultra5 (series 1) 125U processor;
- Single DDR5 memory, up to 32GB, 1\* M.2 2280 NVMe storage;
- Auto detected DC 12/19/24V input, optional wide 9~36V input;
- 4 GbE, optional with 3G/4G/LTE, Wi-Fi/BT;
- 4 USB3.0, 1 HDMI, 2 COM;
- 1 M.2 and 1 Mini-PCle expansion slots;
- Industrial operating -20 ~ +70°C temp. range.

## Specification



|                       |                         |                                                                                    |
|-----------------------|-------------------------|------------------------------------------------------------------------------------|
| System                | BIOS                    | SPI AMI EEI BIOS                                                                   |
|                       | CPU & Graphic           | Intel Core™ Ultra 5 series 125U CPU processor, up to 4.3Ghz, 12-Cores, TDP=15W     |
|                       | Graphic                 | Intel 4X® -cores Graphics (Up to 1.85Ghz)                                          |
|                       | NPU                     | Intel AI Boost, 11TOPS (Int8)                                                      |
|                       | TPM                     | Intel PTT TMP2.0                                                                   |
|                       | Memory                  | SO-DIMM, DDR5-5600 Mhz, Single slot, Max. up to 32GB                               |
|                       | Storage                 | 1* M.2 2280 M-Key slot (PCIe x4, Gen IV, NVMe) SSD, 1* 2.5" SATA III SSD           |
|                       | Network                 | 4* Intel I210 GbE (Support PXE/PRL Boot), optional support 3G/4G/Wi-Fi/BT wireless |
|                       | Audio                   | On-board Realtek Audio HAD Codec                                                   |
|                       | Expansion               | 1* Mini-PCle (Support 4G, with 1 * SIM slot); 1* M.2 E-key 2230 slot (Wi-Fi/BT)    |
| IO interface          | Watchdog                | 0 ~ 256 seconds programmable                                                       |
|                       | Operating system        | Win10/Win11 64-bit; Linux, Ubuntu                                                  |
|                       | Serial port             | COM1: RS232/RS485 (Jumper); COM2: RS232                                            |
|                       | Ethernet                | 4* RJ45, 10/100/1000 Mbps                                                          |
|                       | Audio                   | N/A (Optional Mic-IN/Line-out)                                                     |
|                       | USB                     | 4* USB3.0 (Type-A)                                                                 |
|                       | Display                 | 1* HDMI (Max. support 3840 *2160 @30Hz)                                            |
| Structure             | Power input             | 1* 4 pins, Terminal Blocks                                                         |
|                       | Optional I/O            | N/A (Optional 8* GPIO)                                                             |
|                       | Box structure and Color | Aluminum alloy, anodizing and anti-scratch treatment<br>Silver                     |
|                       | Mount method            | Desktop, wall mount; Optional Din-Rail mount                                       |
|                       | Cooling system          | Finned aluminum heatsinks                                                          |
|                       | Indicator & Button      | Power switch, Power LED, HDD LED                                                   |
|                       | Dimension               | 236.5 * 150.0 * 60.0 (mm)                                                          |
| Power & Environmental | Net weight              | About 1.6 KG                                                                       |
|                       | Operating temp.         | -20 ~ + 70 (°C)                                                                    |
|                       | Storage temp.           | -40 ~ + 80 (°C)                                                                    |
|                       | Humidity                | 10 ~ 95% @ 10C (No condensation)                                                   |
|                       | Vibration               | 50 ~ 500 Hz, 1.5G, 0.15mm peak to peak                                             |
|                       | Shock                   | 10G/Peak (11 ms)                                                                   |
|                       | Power input             | DC 12/19/24V input (Auto detect); Optional wide DC 9~36V range                     |
|                       | Power consumption       | About 25W                                                                          |
| Certificate           | Certificate             | CE/FCC/ROHS                                                                        |



## Ordering information

| Part no.            | Description                                                                                              |                                             |
|---------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------|
| TBOX-12F15-4L       | Intel Core Ultra 5 (series 1) 125U processor, 4 GbE, 4 USB3.0, 2 COM, 1 HDMI, DC 12/19/24V, PSU included |                                             |
| Optional            | Description                                                                                              | Packing List                                |
| -8G / -16G / -32G   | SO-DIMM, DDR5, 8GB/16GB/32GB                                                                             | Standard TBOX-12F15-4L Box PC Product 1 set |
| -256GS/-512GS/ -1TS | M.2 NVMe SSD: 256GB/512GB/1TB                                                                            | Power cable & Plug 1 set                    |
|                     | 2.5" SATA SSD/HDD                                                                                        |                                             |
| TBOX-WiBlu2         | Wi-Fi with BT Integrated module, with Antenna                                                            |                                             |
|                     | Wi-Fi module, with Antenna                                                                               |                                             |
| EC25AU-PCKit        | All network 4G module, with Antenna                                                                      |                                             |
| TBOX-SIMSL0T        | SIM Card slot for 4G/5G module                                                                           |                                             |
| Power Supply        | PSU (If needed)                                                                                          |                                             |
| TBOX-9-36V          | Wide voltage power input DC 9 ~36V with mains adaptor                                                    |                                             |
| TDRK-BOX23-35       | DIN Rail Mounting Kit for TBOX-12F15 Series                                                              |                                             |
| TBOX-AUDIO          | Add Audio Line-In and Mic connections                                                                    |                                             |

