

### Features:

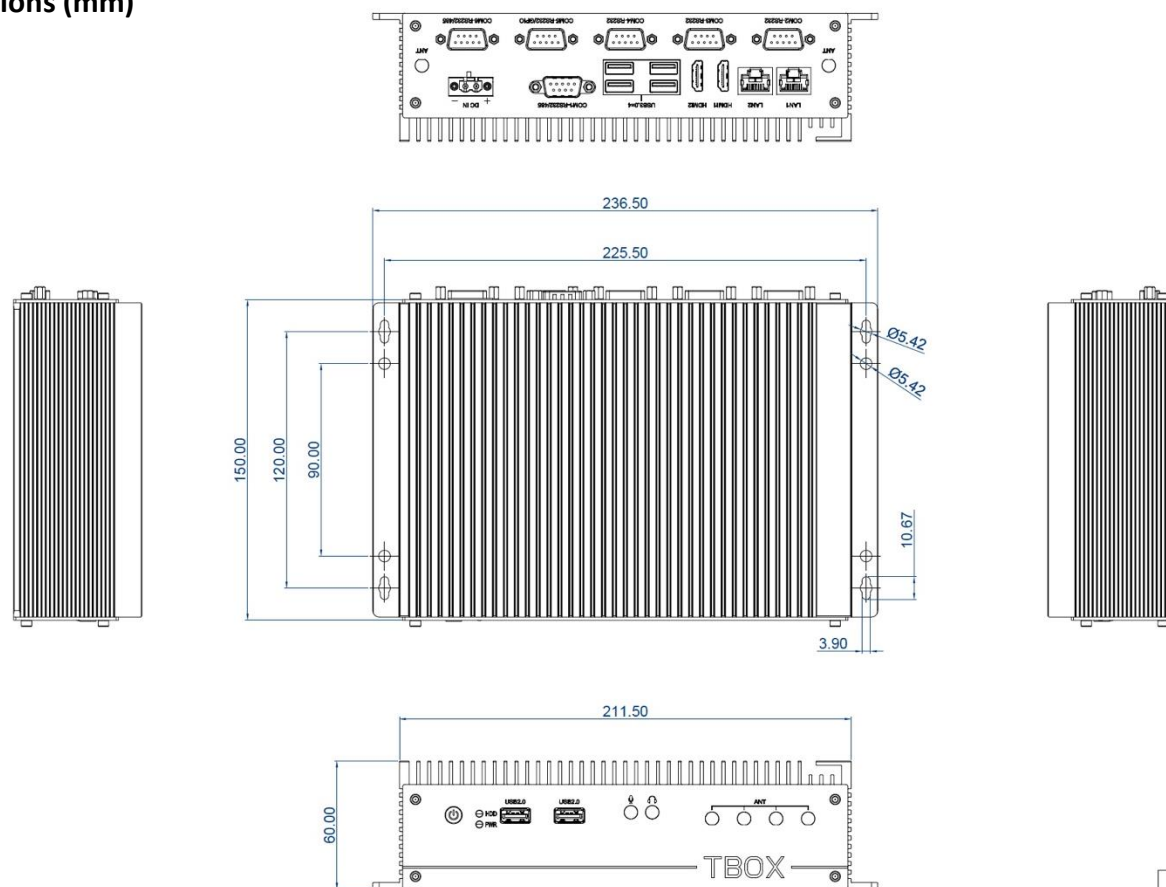
- Rugged & compact, fanless designed box structure;
- On-board Intel Whiskey Lake 8<sup>th</sup> Gen Core i7-8565U Quad-core processor;
- Single DDR4 memory, up to 16GB, 1\* M.2 and 1\* 2.5" SATA storage;
- DC 12V input, optional wide voltage DC 9~36V input;
- 2 GLAN, Dual wireless expansion 4G/5G, WIFI/BT support;
- 6 USB (4 USB3.0), 6 COM (optional GPIO), 2 HDMI;
- Industrial -20 ~ + 70°C operating range, optional -40~+80 °C.



### Specification

|                       |                           |                                                                                                           |
|-----------------------|---------------------------|-----------------------------------------------------------------------------------------------------------|
| System                | BIOS                      | SPI AMI EEI BIOS                                                                                          |
|                       | CPU                       | Intel Whiskey Lake 8 <sup>th</sup> . Gen Core i7-8565U                                                    |
|                       | CPU Ghz                   | Quad-core 1.8Ghz, burst to 4.6Ghz, TDP 15W                                                                |
|                       | TPM                       | Intel PTT TPM2.0                                                                                          |
|                       | Memory                    | SO-DIMM, DDR4-1866/2133/2400 MT/s, Max. up to 16GB                                                        |
|                       | Storage                   | 1*M.2 NGFF Key-M/B slot (PCIe x4, 2242/2280), 1* 2.5" SATA                                                |
|                       | Graphic                   | Intel UHD Graphics 620                                                                                    |
|                       | Network                   | 2* Intel I211 GBE LAN chip, Optional WIFI+BT (M.2 2230), 4G/5G (M.2 3042/3052)                            |
|                       | Audio                     | On-board Realtek ACL 662 Audio controller                                                                 |
|                       | Expansion                 | 1* M.2 Key-B slot, 1* M.2 Key-E slot                                                                      |
|                       | Watchdog                  | 0 ~ 256 seconds programmable                                                                              |
|                       | Operating system          | Win10 /Win11, Linux                                                                                       |
| IO interface          | Serial port               | COM1: RS485 (Optional RS232), COM2/3/4: RS232, COM5: RS232 (Optional GPIO), COM 6: RS485 (Optional RS232) |
|                       | Ethernet                  | 2* RJ45, 10/100/1000 Mbps                                                                                 |
|                       | Audio                     | Optional Mic-in/Line-out                                                                                  |
|                       | USB                       | 4* USB3.0 + 2* USB2.0                                                                                     |
|                       | Display                   | 2* HDMI (Max. support 4096 * 2160 @30Hz)                                                                  |
|                       | Power input               | 1* 2 pins, Phenix terminal                                                                                |
|                       | Optional                  | 8* GPIO (DB9)                                                                                             |
| Structure             | Box structure and surface | Aluminum alloy, anodizing and anti-scratch treatment                                                      |
|                       | Color                     | Silver                                                                                                    |
|                       | Mount method              | Desktop, wall mount                                                                                       |
|                       | Cooling system            | Finned aluminum heatsinks                                                                                 |
|                       | Indicator & Button        | Power switch, Power LED, HDD LED                                                                          |
|                       | Dimension                 | 236.5 * 150 * 60 (mm)                                                                                     |
|                       | Net weight                | About 1.6 KG                                                                                              |
| Power & Environmental | Operating temp.           | -20 ~ + 60 °C                                                                                             |
|                       | Storage temp.             | -40 ~ + 80 °C                                                                                             |
|                       | Humidity                  | 10 ~ 95% @ 10C (No condensation)                                                                          |
|                       | Vibration                 | 50 ~ 500 Hz, 1.5G, 0.15mm peak to peak                                                                    |
|                       | Shock                     | 10 G/Peak (11 ms)                                                                                         |
|                       | Power input               | DC 12V (Optional DC 9~36V)                                                                                |
|                       | Power consumption         | About 25W                                                                                                 |
|                       | EMC                       | CE/FCC Class A                                                                                            |

## Dimensions (mm)



## Ordering information

| Part no.                         | Description                                                                         |
|----------------------------------|-------------------------------------------------------------------------------------|
| TBOX-12835                       | Intel Whiskey Lake Core i7-8565U, 2 RJ45, 4 USB3.0, 2 USB2.0, 6 COM, 2 HDMI, DC 12V |
| TBOX-12805                       | Intel Whiskey Lake Celeron 4205U, 2 RJ45, 4 USB3.0, 2 USB2.0, 6 COM, 2 HDMI, DC 12V |
| TBOX-12815                       | Intel Whiskey Lake Core i3-8145U, 2 RJ45, 4 USB3.0, 2 USB2.0, 6 COM, 2 HDMI, DC 12V |
| TBOX-12825                       | Intel Whiskey Lake Core i5-8265U, 2 RJ45, 4 USB3.0, 2 USB2.0, 6 COM, 2 HDMI, DC 12V |
| -2G / -4G / -8G                  | Memory: SO-DIMM, DDR4, <u>4GB/8GB/16GB</u>                                          |
| -64GS / -128GS / -256GS / -512GS | M.2 SSD: <u>128GB/256GB/512GB</u>                                                   |
| TBOX-WiFi-M2                     | Wi-Fi module, with Antenna (M.2 interface)                                          |
| TBOX-WiBlu-M2                    | Wi-Fi module with BT integrated, with antenna (M.2 interface)                       |
|                                  | All network 4G module, with Antenna (M.2 interface)                                 |
|                                  | 5G module, with antenna (M.2 interface)                                             |
| DC modules                       | DC to DC, Wide voltage DC 9~36V                                                     |

## Packing List

|                                |
|--------------------------------|
| ■ 1-unit standard Product      |
| ■ 1 set 60W PSU (Power supply) |
| ■ 1 set Power Cable & Plug     |

