

### Features:

- Modular & Fanless designed, aluminum-magnesium alloy;
- Intel 12<sup>th</sup> Gen. Alder Lake-U Core i3/i5/i7 processors;
- Widescreen 23.8" TFT LCD Display, LED Backlit, FHD 1920\*1080;
- Multi up to 10 points Pcap. touchscreen, EETI controller;
- DC terminal, wide 9~36 V input range;
- 2 RJ45, 2 USB3.1, 2 USB3.0, 3 COM, 1 HDMI, 1 DP, Audio;
- 1 USB type-C (USB3.1 & DP1.4a), 1 SW Remote Switch;
- Intel PTT TPM2.0, Support Windows 11 OS;
- Panel mount, VESA 75/100 mount, Front IP65 rated protection;
- Optional 2 M.2 and 1 Mini-PCIe expansion slots.

### Specification



|                              |                     |                                                                                                                      |
|------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Hardware &amp; System</b> | BIOS                | SPI AMI EEL BIOS                                                                                                     |
|                              | CPU                 | Intel 12 <sup>th</sup> Gen. Core i3-1215U, Core i5-1235U, Core i7-1255U                                              |
|                              | Graphic             | Intel UHD/Iris Xe Graphic                                                                                            |
|                              | Memory              | 2* SO-DIMM, Support DDR5-4800 MHz, Max. up to 64GB                                                                   |
|                              | Storage             | 1* M.2 2280 M-Key slot (PCIe x4 Gen IV, NVMe) SSD, 1* M.2 2280 M-Key slot (SATA) SSD <sup>[1]</sup> , 1* SATA3.0 SSD |
|                              | Network             | 1* Intel I226 (2.5GbE), 1* Intel I219 (GbE) Network chips, optional 3G/4G/5G/Wi-Fi/BT, Wi-Fi6 wireless               |
|                              | Audio               | On-board Realtek ACL 897 Audio controller                                                                            |
|                              | Expansion           | 1* M.2 (NGFF) B-Key 3042/3052 slot, 1* M.2 E-Key 2240 slot, 1* Mini-PCIe slot, 1* SIM Card slot                      |
|                              | Watch dog           | 0 ~ 256 seconds programmable                                                                                         |
|                              | Operating System    | Win10 IoT 2021 LTSC; Win10 (21H2), Win11(21H2 or later); Linux Kernel 5.17 or later                                  |
| <b>I/O Interface</b>         | Ethernet            | 2 RJ45                                                                                                               |
|                              | COM                 | COM1/2: RS232/RS485/RS422 (BIOS configured); COM3: RS232/GPIO                                                        |
|                              | Audio               | Mic-in/Line-out (2 in 1, 3.5mm Jack)                                                                                 |
|                              | USB                 | 2* USB3.1 (USB3.2 Gen2 x1, 10 Gbps), 2* USB3.0 (USB3.2 Gen1 x1, 5Gbps), 1* USB-C (USB3.1 & DP1.4a)                   |
|                              | Display             | 1* HDMI1.4 (Max. resolution to 4K@30Hz), 1* DP++ (Max. support 8K @30Hz)                                             |
|                              | Power               | 1* 2 Pins, Phenix Terminal                                                                                           |
| <b>LCD Display</b>           | Size/Type           | 23.8" TFT LCD Display                                                                                                |
|                              | Resolution          | 1920 * 1080 (Full HD)                                                                                                |
|                              | Brightness          | 250 nits                                                                                                             |
|                              | Backlit & Lifetime  | LED Backlit & 30K hours                                                                                              |
|                              | Display Area        | 527.04 * 296.46 (mm)                                                                                                 |
|                              | View Angle          | 89/89/89/89                                                                                                          |
| <b>Touchscreen</b>           | Type                | Projective capacitive touchscreen                                                                                    |
|                              | Touch points        | Multi points touch, max. up to 10 points                                                                             |
|                              | Durability          | >100 000 000 times                                                                                                   |
|                              | Surface Hardness    | MOHS 6H                                                                                                              |
|                              | Touch Controller    | EETI                                                                                                                 |
|                              | Special Treatment   | Anti-Fingerprint (AF)                                                                                                |
| <b>Structure</b>             | Structure & Surface | Magnesium-Aluminum alloy, sand blasting, anodized treated                                                            |
|                              | Cooling System      | Large area finned heatsink (Fanless designed)                                                                        |
|                              | Overall Dimension   | 578.4 * 347.9 * 59.0 (mm)                                                                                            |
|                              | Cut-out Dimension   | 568 * 338 (mm)                                                                                                       |
|                              | Net Weight          | 7.6 KG                                                                                                               |
|                              | Mount Method        | Panel mount, VESA 75/100 Mount                                                                                       |
|                              | Operating temp.     | 0 ~ + 50 (°C)                                                                                                        |

# TPC-DCT238D

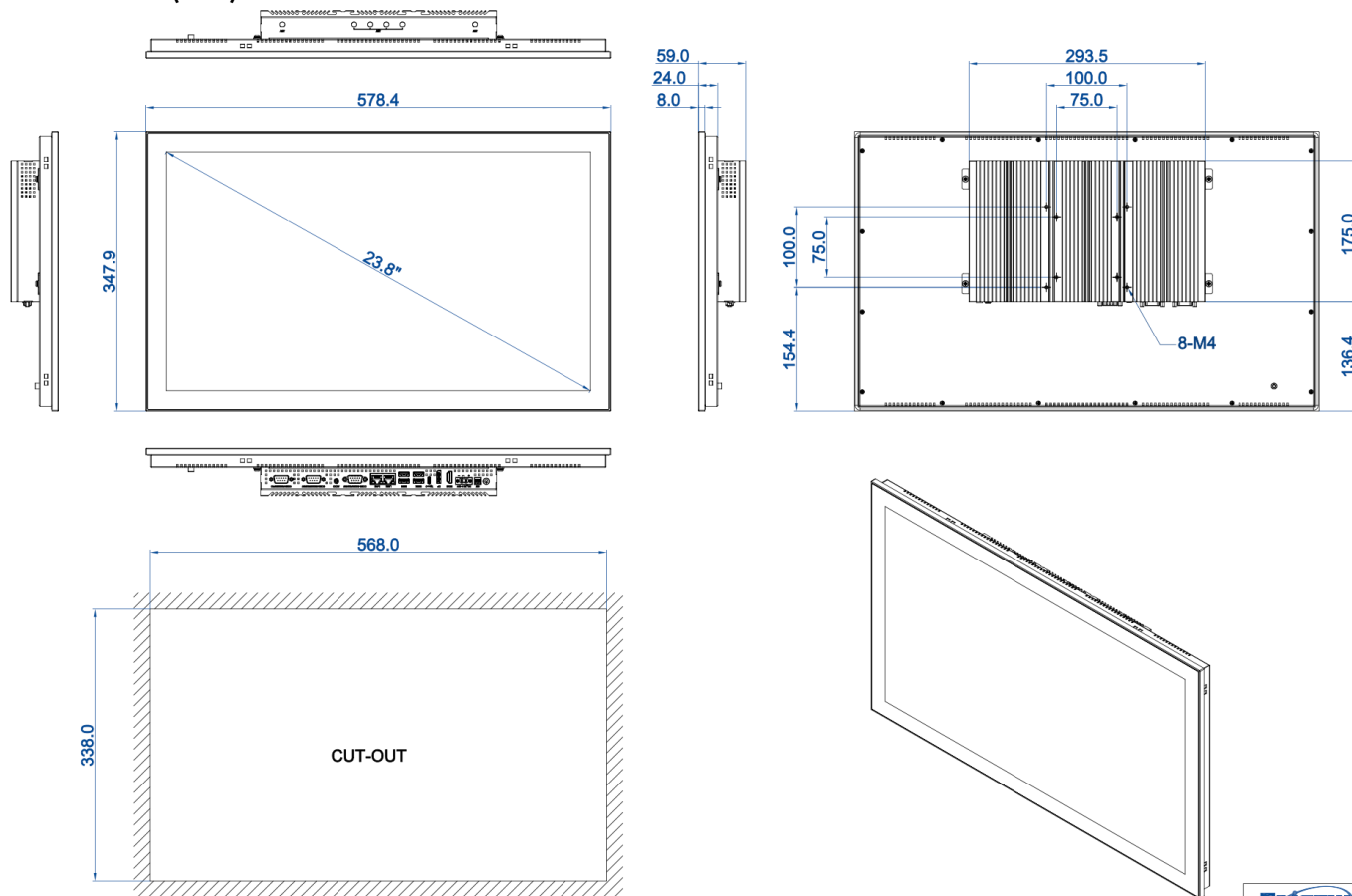
## Power & Environmental

|                   |                                        |
|-------------------|----------------------------------------|
| Storage temp.     | -20 ~ + 60 (°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       | Wide DC 9~36 V                         |
| Power consumption | About 45W                              |
| Certificate       | CE/FCC/ROHS                            |

[1] This M.2 slot Default as SATA SSD, optional as NVMe 4x SSD to support RAID 0/1 (selected by resistors).

DIMENSIONAL DRAWING:TPC-DCT238D

## Dimension (mm)



DIMENSIONS IN MILLIMETERS

TAICEN  
DATE:2024.10.22  
REV:C Unit:mm

## Ordering information

| Part no.             | Description                                                                                                                                       | Packing List                                |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| TPC-DCT238D1         | 23.8" LCD, FHD 1920 *1080, Intel Core i3-1215U, Pcap. Touch, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 1 HDMI, 1 DP, 3 COM, Audio, 1 SW, DC 9~36V, PSU |                                             |
| TPC-DCT238D2         | 23.8" LCD, FHD 1920 *1080, Intel Core i5-1235U, Pcap. Touch, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 1 HDMI, 1 DP, 3 COM, Audio, 1 SW, DC 9~36V, PSU |                                             |
| TPC-DCT238D3         | 23.8" LCD, FHD 1920 *1080, Intel Core i7-1255U, Pcap. Touch, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 1 HDMI, 1 DP, 3 COM, Audio, 1 SW, DC 9~36V, PSU |                                             |
| Optional Accessories | Description                                                                                                                                       | Packing List                                |
| Memory               | SO-DIMM, DDR5, <u>8GB/16GB/32GB/64GB</u>                                                                                                          | Standard TPC-DCT238D Panel PC Product 1 set |
| Storage              | SSD: <u>128GB/256GB/512GB/1TB</u>                                                                                                                 | PSU (90W Power Supply) 1 set                |
| Wireless             | Wi-Fi Module, with Antenna                                                                                                                        | Panel mount clips (Metal) 1 set (8 pieces)  |
|                      | Wi-Fi Module with BT Integrated, With Antenna                                                                                                     | Power Cable & Plug 1 set                    |
|                      | All Network 4G module, with Antenna                                                                                                               |                                             |
|                      | 5G Network module, with Antenna                                                                                                                   |                                             |