

TPC-DCT121D

12.1" XGA Panel PC with Intel Alder Lake -U; Front IP65 rated; 2 RJ45, 4 USB, 1 HDMI, 1 DP, 2 COM, 1 SW; Pcap. Touch; DC 9~36V; 2 M.2 & 1 Mini-PCIe slots.

Version: 3.0



Features:

- Modular & Fanless designed, aluminum-magnesium alloy;
- Intel 12th Gen. Alder Lake-U Core i3/i5/i7 processors;
- 12.1" TFT LCD Display, LED Backlit, XGA 1024*768;
- 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, 2 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



Hardware & System	BIOS	SPI AMI EEI BIOS
	CPU	Intel 12 th 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 ^[1]
	Network	1* Intel I226 (2.5GbE), 1* Intel I219 (GbE) Network chips, optional 3G/4G/5G/Wi-Fi/BT, Wi-Fi 6 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
I/O Interface	Ethernet	2 RJ45
	COM	COM1: RS232/RS485/RS422 (BIOS configured); COM2: RS232/RS485/RS422 (Optional 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
LCD Display	Size/Type	12.1" TFT LCD Display
	Resolution	1024 * 768 (XGA)
	Brightness	350 nits
	Backlit & Lifetime	LED Backlit & 30K hours
	Display Area	245.76 * 184.32 (mm)
	View Angle	80/80/80/80
Touchscreen	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)
Structure	Structure & Surface	Magnesium-Aluminum alloy, sand blasting, anodized treated
	Cooling System	Large area finned heatsink (Fanless designed)
	Overall Dimension	306.0 * 242.5 * 59.0 (mm)
	Cut-out Dimension	295 * 232 (mm)
	Net Weight	3.5 KG
	Mount Method	Panel mount, VESA 75/100 Mount
	Operating temp.	-20 ~ + 70 (°C)

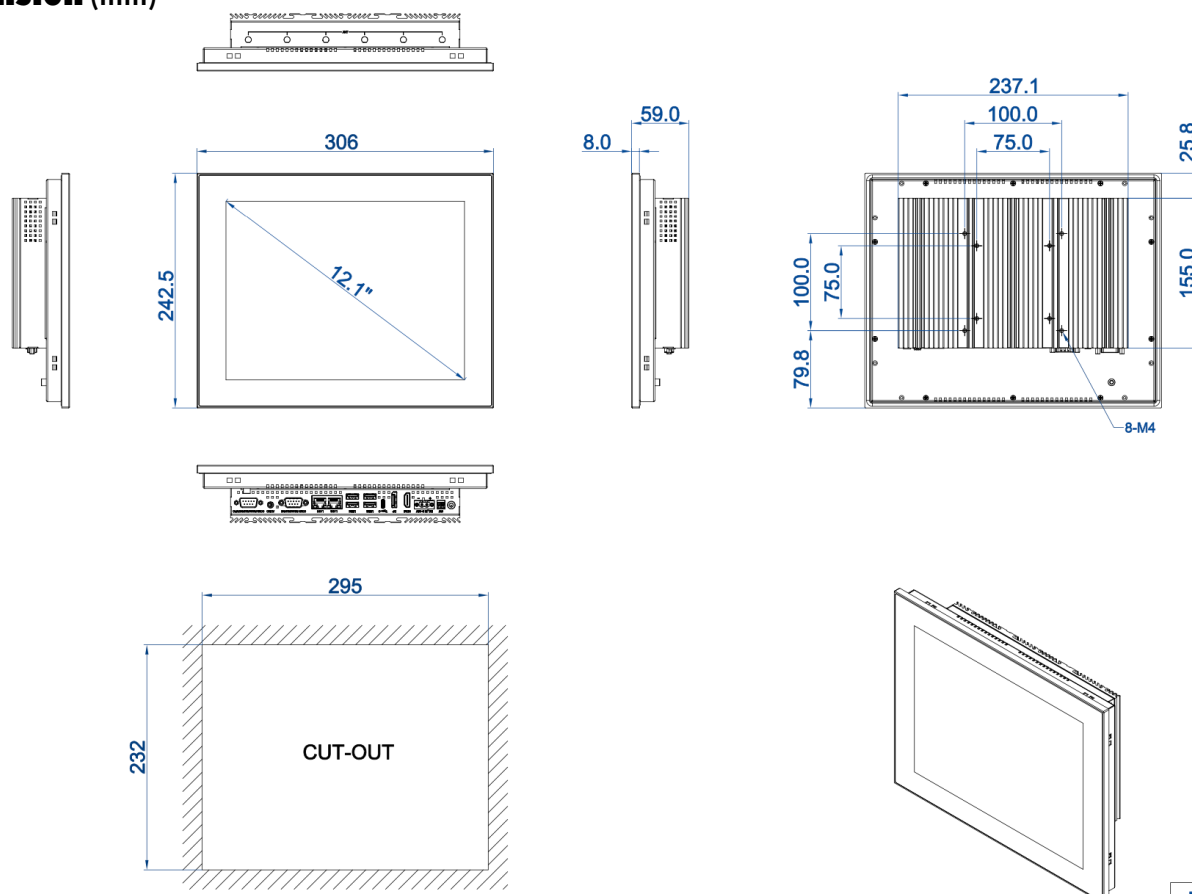
Power & Environmental

Storage temp.	-30 ~ + 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	Wide DC 9~36 V
Power consumption	About 35W
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-DCT121D

Dimension (mm)



DIMENSIONS IN MILLIMETERS

TAICEM
DATE:2024.10.22
REV:C Unit:mm

Ordering information

Part no.	Description		
TPC-DCT121D1	12.1" LCD, XGA 1024 *768, Intel Core i3-1215U, Pcap. Touch, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 1 HDMI, 1 DP, 2 COM, Audio, 1 SW, DC 9~36V, PSU		
TPC-DCT121D2	12.1" LCD, XGA 1024 *768, Intel Core i5-1235U, Pcap. Touch, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 1 HDMI, 1 DP, 2 COM, Audio, 1 SW, DC 9~36V, PSU		
TPC-DCT121D3	12.1" LCD, XGA 1024 *768, Intel Core i7-1255U, Pcap. Touch, 2 RJ45, 2 USB3.1, 2 USB3.0, 1 USB-C, 1 HDMI, 1 DP, 2 COM, Audio, 1 SW, DC 9~36V, PSU		
Optional Accessories	Description	Packing List	
Memory	SO-DIMM, DDR5, <u>4GB/8GB/16GB/32GB/64GB</u>	Standard TPC-DCT121D Panel PC Product	1 set
Storage	M.2 2280 (NVMe or SATA) SSD: <u>128GB/256GB/512GB/1TB</u> 2.5" SATA SSD/HDD	PSU (90W Power Supply)	1 set
Wireless	Wi-Fi Module, with Antenna Wi-Fi Module with BT Integrated, With Antenna All Network 4G module, with Antenna 5G Network module, with Antenna	Panel mount clips (Metal)	1 set (8 pieces)
		Power Cable & Plug	1 set