

TPC-15U13/21U13/24U13

Intel® Core™ P Series 15.6"/21.5"/23.8" Full HD Industrial Panel PC

EFCO



Features

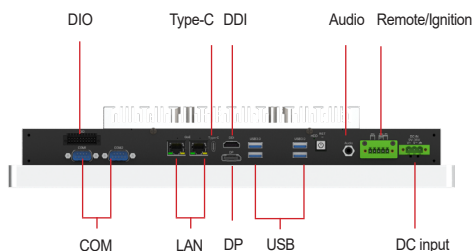
- Intel® platform Core™ i7, i5, i3 and processor
- IP65 Compliant aluminum front bezel
- Fanless operation@ 0~50°C environment
- Internal multiple M.2 slot for expansion
- Suitable for Automation, HMI, general purpose applications

Specifications

Panel	
LCD Size / Type	15.6" Full HD TFT LED LCD (TPC-15U13) 21.5" Full HD TFT LED LCD (TPC-21U13) 23.8" Full HD TFT LED LCD (TPC-24U13)
Max. Resolution	1920 x 1080
Display Color	16.7M
Viewing Angle	178(H) / 178(V)
Brightness	400 cd/m2 (TPC-15U13) 250 cd/m2 (TPC-21U13) 350 cd/m2 (TPC-24U13)
Contrast Ratio	1000:1
Backlight	LED
Touch Screen	
Touch Screen Type	10-point Projected Capacitive
Transparency	≥91%
Surface Hardness	7H Surface Hardness
System	
Processor	13th Gen Intel® Core™ (formerly Raptor Lake P-Series) Intel® Core™ i7-1365UE (2 P-cores 1.7GHz up to 4.9GHz, 8 E-cores 1.2GHz up to 3.7GHz, 12MB cache, 15W) Intel® Core™ i5-1335UE (2 P-cores 1.3GHz up to 4.5GHz, 8 E-cores 1.1GHz up to 3.3GHz, 12MB cache, 15W) Intel® Core™ i3-1315UE (2 P-cores 1.2GHz up to 4.5GHz, 4 E-cores 0.9GHz up to 3.3GHz, 10MB cache, 15W)
Memory	1x SO-DIMM DDR5 4800MT/s (64GB Max.) support ECC(By CPU)
Graphics	Intel® Iris® Xe Graphics
AI Controller (AIC)	AI for system monitoring and predictive analysis
Watchdog Timer	Runtime: 10 – 65535 seconds Powerup: 120 – 65535 seconds
TPM	SLB9665 (TPM 2.0)
External IO	
Display	1x DP support 4096x2304@60Hz 1x DDI support 1920x1080@60Hz 1x Type-C support 1920x1080@60Hz
Ethernet	2x RJ45 2.5GbE (Intel® i226iT 10/100/1000/2500Mbps)/ Wake-on-LAN and PXE /iAMT
USB	4x USB 3.2 Gen1 ports via native XHCI controller (0.9A each port) Internal USB 2.0 Header
COM	2x RS232/422/485 , RS485 support auto flow control
Audio	3.5Φ Lineout R/L, Mic In R
Digital I/O	16 bit DIO or Option Isolate 8 DI/ 8 DO

Expansion Slot	
M.2 Slot	1x M.2 B-Key(3042) 1x M.2 E-Key(2230)
Storage	
SATA	1x Internal SATA port for 2.5" HDD/SSD
M.2	1x M.2 M-Key(2242) NVMe
Power	
Remote/Ignition	1x ATX power on/off switch, 5-pin terminal block including 3-pin remote control and 2-pin ignition signals (pitch 3.81 mm)
Power Input	9 ~ 36V DC-In
Power Interface	3-pin Terminal Block (V+/V-/GND)
Protection	Surge 80V/1ms, Reverse-Voltage protection
Power Mode	AT/ATX/IGN (BIOS setting)
Mechanical	
Dimension (W x H x D)	391.5 x 242 x 69 mm (TPC-15U13) 538 x 329.5 x 78 mm (TPC-21U13) 578.6 x 350.6 x 79 mm (TPC-24U13)
Weight	4.3 kg (TPC-15U13) 7.2 kg (TPC-21U13) 8 kg (TPC-24U13)
Mounting	VESA mount (100x100)
Environment	
Operating Temperature	0°C to 50°C (32°F ~ 122°F)
Storage Temperature	-20°C to 70°C (-4°F ~ 158°F)
Relative Humidity	95% @ 40°C (104°F), non-condensing
Vibration During Operation	1 Grms with HDD; 2Grms with SSD (IEC60068-2-64: Random 5~500Hz)
Shock During Operation	10Grms with SSD (IEC60068-2-27: Half Sine, 11ms duration)
Certification	
EMC	CE FCC Class A
OS Support	
Windows	Windows 10 64Bit Windows 10 IoT 64Bit Windows 11 64Bit Windows 11 IoT 64Bit
Linux	Linux

I/O Interfaces



Ordering Information

Model Name	Article Number (A/N)
TPC-15U13	
TPC-15U13-1315 Barebone	20010-000721-A.0
TPC-15U13-1335 Barebone	20010-000722-A.0
TPC-15U13-1365 Barebone	20010-000723-A.0
TPC-15U13-1315i Barebone	20010-000730-A.0
TPC-15U13-1335i Barebone	20010-000731-A.0
TPC-15U13-1365i Barebone	20010-000732-A.0
TPC-21U13	
TPC-21U13-1315 Barebone	20010-000724-A.0
TPC-21U13-1335 Barebone	20010-000725-A.0
TPC-21U13-1365 Barebone	20010-000726-A.0
TPC-21U13-1315i Barebone	20010-000733-A.0
TPC-21U13-1335i Barebone	20010-000734-A.0
TPC-21U13-1365i Barebone	20010-000735-A.0
TPC-24U13	
TPC-24U13-1315 Barebone	20010-000727-A.0
TPC-24U13-1335 Barebone	20010-000728-A.0
TPC-24U13-1365 Barebone	20010-000729-A.0
TPC-24U13-1315i Barebone	20010-000736-A.0
TPC-24U13-1335i Barebone	20010-000737-A.0
TPC-24U13-1365i Barebone	20010-000738-A.0

Optional Accessories

AC-DC Power Adapter	AC-DC power adapter with pitch 5.0mm 3-pin terminal block plug
ADT-24V90-T3A	24V/90W
ADT-24V120-T3A	24V/120W
ADT-24V160-T3A	24V/160W
AC Power Cord	H05VV-F 3G 0.75mm ² , 1.8m, 250V, 10A
Power Cord-US	YP12-YC12: category B type plug, TW/JR/US/CA/TH/PH/Central America
Power Cord-CN	YP03-YC12: category D type plug, CN
Power Cord-AZ	YP35-YC12: category D type plug, AU/NZ
Power Cord-DE	YP22-YC12: category G type plug, DE
Power Cord-BR	YP61-YC12: category I type plug, UK/HK/MO/SG/MY

Cable & Connector

TBP5-S03	1x 3-Pin, pitch5.0mm Female Terminal Block Plug for DC input
TBP3-S05	1x 5-Pin, pitch3.81mm Female Terminal Block Plug for remote connector
TBP3-D20	1x 2x10-Pin, pitch2.54mm Female Terminal Block Plug for DIO connector
20380-000302-A.0	1x SATA cable (Data+Power), 500mm

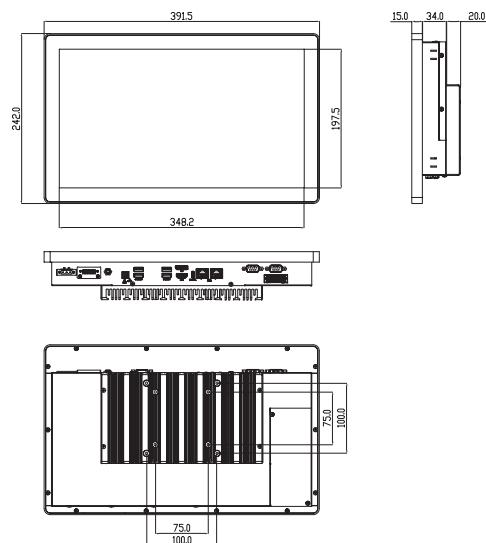
Packing List

Item No.	
1	1x Panel PC
2	optional accessories by order

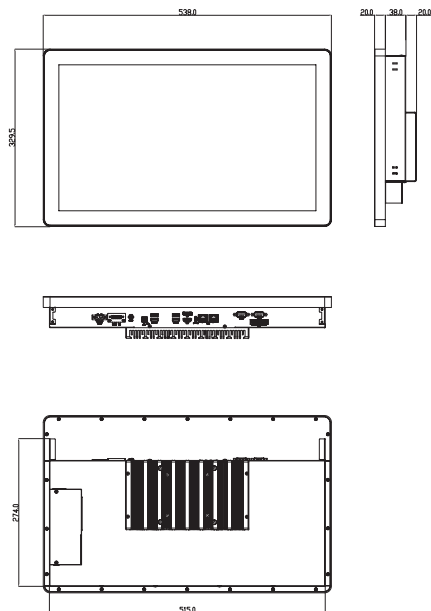
Dimensions

Units: mm

TPC-15U13



TPC-21U13



TPC-24U13

