TPC-315 EHL

15" XGA Elkhart Lake Thin-Client Terminal with Intel® Atom™/ Celeron® Processor

Features

- Industrial-grade 15" XGA TFT LCD with 70K lifetime and LED backlight
- Intel® Elkhart Lake (EHL) Atom™ 6425E 2.00 GHz quad-core / Celeron® J6412 2.00 GHz quad-core processor with 4 GB DDR4 SDRAM
- True-flat touchscreen with 5-wire resistive touch control and IP66-rated front panel
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Front-facing LED indicators to show operating status
- Built-in Advantech iDoor technology, SSD/HDD bay and VESA mount
- Compact, fanless system with aluminum alloy front bezel and chassis grounding protection
- Supports Advantech's SNMP Subagent software
- Supports Advantech's WISE-PaaS/RMM remote management software

Introduction

TPC-315 EHL thin-client terminal is a industrial panel PC model equipped with 15" XGA TFT LED LCD, low-power Intel® Atom™ 6425E 2.00 GHz quad-core / Celeron® J6412 2.00 GHz quad-core processor, and 4 GB of DDR4 SDRAM. TPC-315 EHL delivers high-performance computing in a compact, fanless system. For enhanced durability to satisfy diverse industrial automation applications, TPC-315 EHL supports a wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F) and features a true-flat 5-wire resistive touchscreen with IP66-rated front panel, die-cast aluminum alloy front bezel, and bult-in 100 x 100 VESA mount. Moreover, with the provision of one full-size mini PCIe slot, which supports USB/PCIe interface for Advantech's iDoor technology, TPC-315 EHL can be easily expanded to provide additional I/O ports, isolated digital I/O, fieldbus protocols, MRAM, and 5G/ GPS/GPRS/Wi-Fi communication capabilities.

Specifications

General

BIOS	AMI UEFI
Certification	BSMI, CCC, CE, FCC Class A, UL
Cooling System	Fanless design
Dimensions (W x H x D)	383.2 x 307.3 x 67 mm (15.09 x 12.10 x 2.64 in)
Enclosure	Front bezel: Die cast aluminum alloy Back housing: Die cast aluminum alloy
Mount Options	VESA mount, Desktop/wall/panel
OS Support	Windows 10 Enterprise LTSC, Advantech Linux, Android
Power Consumption	TBD
Power Input	24 V_{DC} +/- 20%
Watchdog Timer	15 ~ 255 sec (system)
Weight (Net)	5.15kg (11.35lbs)

System Hardware

CPU	Intel® Atom™ 6425E 2.00 GHz, quad core / Celeron® J6412 2.00 GHz, quad core processor
Memory	1 x SODIMM with 4 GB DDR4 SDRAM (up to 32 GB)
LAN	2 x Intel® I211; 10/100/1000 BASE-T
Expansion Slots	1 x Full-size mini PCIe
Storage	1 x M.2 B key 2242/ 2280 (SATA/ USB3.0) 3042/ 3052 (5G) 1 x 2.5" SSD/ HDD (SATA, Max. 7mm)
I/O	1 x RS-232 1 x RS-232/422/485 3 x USB 3.2 1 x USB 2.0 1 x iDoor slot 1 x Displayport (Video output) 1 x Audio line out/ mic in 1 x Remote Power Buttom

LCD

Display Type	XGA TFT LED LCD
Display Size	15'' (4:3)
Max. Resolution	1024 x 768
Max. Colors	16.2M
Luminance cd/m²	300
Viewing Angle (H/V°)	176°/176°
Backlight Life	70,000hrs
Contrast Ratio	2000:1

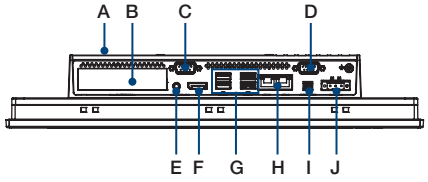
Touchscreen

Lifespan	36 million touches at a single point
Light Transmission	Above 75%
Resolution	Linearity
Type	5-wire analog resistive

Environment

Humidity	10 ~ 95% RH @ 40 °C, non-condensing
Ingress Protection	IP66-rated front panel
Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
Storage Temperature	-30 ~ 70 °C (-22 ~ 158 °F)
Vibration Protection	With SSD: 1 Grms (5 ~ 500 Hz) (operating, random vibration)

Rear View



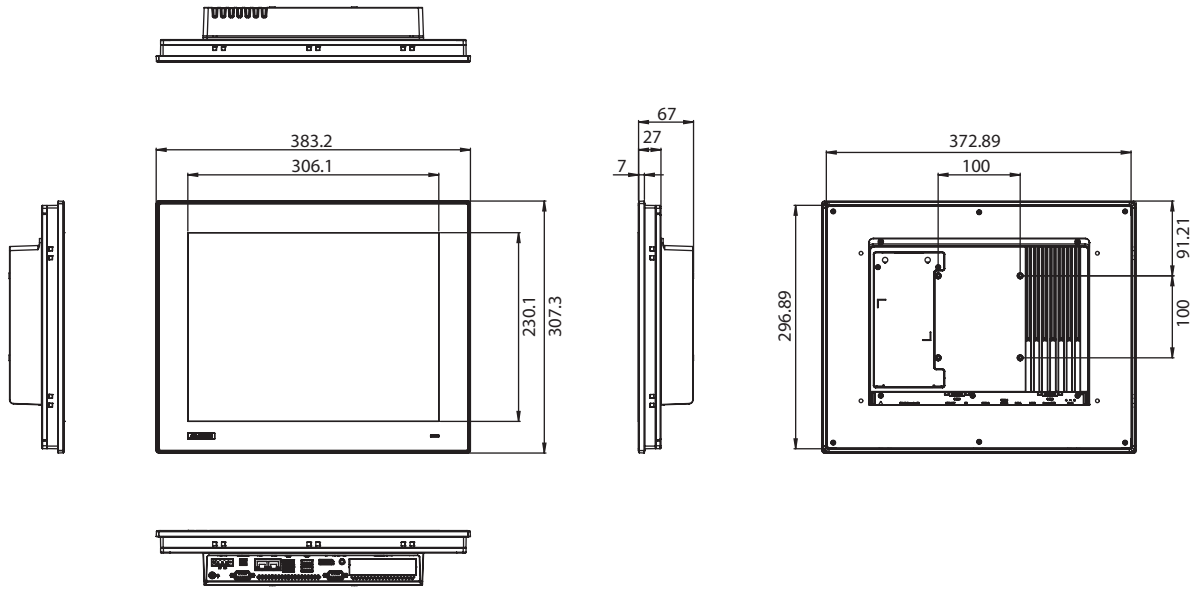
A. Default HDD/SSD Bay
B. iDoor slot
C. RS-232/422/485
D. RS-232
E. Audio line out/ mic in
F. Display Port
G. USB 3.2/2.0
H. LAN (10/100/1000)
I. Remote Power Button
J. Power Receptor

All product specifications are subject to change without notice.

Last updated: 10-Sep-2021

Dimensions

Unit: mm



TPC-315 EHL Panel Cutout Dimensions: 374.5 x 298.5 mm (14.74 x 11.75 in)

Ordering Information

- **TPC-315-RE22A** 15" XGA panel PC with Intel® Atom™ 6425E 2.00 GHz quad-core CPU, 4 GB DDR4 SDRAM
- **TPC-315-RJ22A** 15" XGA panel PC with Intel® Celeron® J6412 2.00 GHz quad-core CPU, 4 GB DDR4 SDRAM

Optional Accessories

- **96PSA-A120W24T2-3** 120W 24V_{DC} power supply
- **1702002600** Power cable (US) 1.8 M
- **1702002605** Power cable (EU) 1.8 M
- **1702031801** Power cable (UK) 1.8 M
- **1700000596-11** Power cable (China/Australia) 1.8 M

Embedded OS

- **Windows 10 Enterprise LTSC**
- **Advantech Linux**
- **Android**

iDoor Modules

- **PCM-26D2CA-AE** SJA1000 CANbus module with CANopen and 2 x DB9
- **PCM-26D1DB-MAE** Hilscher netX100 fieldbus module with PROFIBUS and 1 x DB9
- **PCM-27D24DI-AE** Digital I/O module with 16 DI/8 DO, isolation protection, and 1 x DB37
- **PCM-24D2R4-BE** OXPCIe-952 UART with isolated RS-422/485 and 2 x DB9
- **PCM-24D2R2-BE** OXPCIe-952 UART with isolated RS-232 and 2 x DB9
- **PCM-26R2EC-MAE** 2-Port Hilscher netX100 FieldBus mPCIe, EtherCAT, RJ45
- **PCM-27J3AU-AE** 3-Port audio stereo with mPCIe and 3.5-mm jack
- **PCM-24S2WF-BE** WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1, M.2/ Full-size mPCIe, Antennas
- **PCM-24R1TP-BE** Intel I225, 2.5Gb/s, IEEE 1588, TSN, RJ45 x 1
- **PCM-24D4R2-BE** 2-Port Isolated RS-232 mPCIe, DB9 x 2
- **PCM-24D4R4-BE** 4-Port Non-Isolated RS-422/485 mPCIe, DB37 x 1
- **PCM-23U1DG-CE** USB Slot w/ Lock for USB Dongle, Half-size mPCIe
- **PCM-24U2U3-BE** USB 3.0, mPCIe, USB-A type x 2
- **PCM-2300MR-AE** MR4A16B, MRAM, 2MByte
- **PCM-24S34G-ABE** U-blox TOBY-L200 LTE/HSPA+/GPRS, mPCIe, antennas, for America
- **PCM-24S34G-EBE** U-blox TOBY-L210 LTE/HSPA+/GPRS, mPCIe, antennas, for EMEA/APAC

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact Advantech for certificate compliance.