

PANEL-PC
 With the high-performance 7th-generation Intel®
 CPU processor, 12.1inch/15inch
XPT-T1000 Series



* Specifications, color and design of the products are subject to change without notice.

Features

- Seventh-generation Core i7 / Core i5 processor adopted

This product adopts the CPU that saves power consumption and also provides high computing and graphic performances. Embedded-type CPU makes the stable supply possible.

- Fan-less design reduces maintenance work

The product is fan-less to ensure a totally spindle-less design that simplifies maintenance, relieving the concern about dust or foreign matter to get into the product. Moreover, along with minimized use of degrading parts greatly reduce maintenance work.

- "Power failure protection system" features power-off without OS shutdown

Equipped with the "Power failure protection system" function that protects data and prohibits writing to storage in the event of power failure *1. Along with the lockdown (disk writing suppression) function of Windows IoT Enterprise, power can be safely turned off without a shutdown process. Moreover, file system damage or data damage caused by sudden power failure can be avoided.

- A wide range of power supplies (10.8 - 31.2VDC) supported

As the product supports a wide range of power (10.8 - 31.2VDC), it can be used in a variety of power environments. The separately available AC adapter adds support for 100- 240VAC power.

- Major types of peripherals are supported with rich interfaces

It has a variety of extended interface such as DVI-D x 1, DisplayPort x 1, 1000BASE-T x 2, USB3.0 x 4, USB2.0 x 2, serial (RS-232C) x 2.

It has two slot-in type of 2.5-inch SATA disk slots, providing the ability to separate data from the operating system, as well as the convenience of being able to use one slot for system startup and the other for maintenance or for taking home system logs or collected data.

- Adopting a 5-wire resistive film touch-screen holds high durability

It has a 5-wire resistive film touch-screen that maintains high durability. The operating life is long-lasting of 36 million times. *2

- The attachment fitting and cable ties prevent problems caused by cable disconnections

For connectors with no locking mechanism such as USB cable, unnecessary trouble can be avoided by the use of cable ties for prevention of cable disconnection.

- Safety design required for embedded applications

For Windows 10 IoT Enterprise 2019 LTSC pre-installed type, it is possible to use the Write Filter *3 function of OS.

It is designed for safety required for embedding purpose, for example, prohibiting unwanted writing to the HDD or SSD with Write Filter function will relieve the concern about the writing limits to the HDD or SSD and prevent an unintentional

This product is a fan-less, high-performance, industrial-use PANEL computer that is equipped with the 7th-generation Intel® Core™ i7-7600U/Core i5 7300U CPU processor. Along with its power-saving and high-performance features, this product has a rich variety of interfaces and achieves fan-less operation by way of natural air-cooling.

The size of LCD is selectable from 12.1-inch or 15-inch to suit the user's needs.

Various interfaces such as dual LAN / USB3.0 / DisplayPort / DVI-D / RS-232C, and the slot-in 2.5 inches SATA disk bay unit being installed. Additionally, the product employs 5-wire resistive touch to maintain the durability.

Embedded-type CPU has been adopted. The use of readily available parts ensures the product to be applied easily. In addition, Contec-customized BIOS allows support to be provided at the BIOS level.

Replaceable with our earlier products of the PT-956S series, this PANEL computer can be easily replaced into the existing system.

* The contents in this document are subject to change without notice.

* Visit the CONTEC website to check the latest details in the document.

* Visit the CONTEC website to check the latest OS.

* The information in the data sheets is as of December, 2023.

system alteration.

*1 Only the SSD 256GB (TLC) model are compatible with the " Power failure protection system ".

*2 with Load 300g, Speed twice/second, by machine keying.

*3 Windows 10 IoT Enterprise 2019 LTSC contains UWF (Unified Write Filter) function. It protects the disk from being actually written by redirecting data into such as RAM.

Included Items

| Name | XPT-T1000LX/ XPT-T1010LXC | XPT-T1000HX |
|--|------------------------------|-------------|
| | [12.1" model] | [15" model] |
| The Main Body | 1 | 1 |
| The Attachment Fittings | 8 | 10 |
| DisplayPort Cable Removal Prevention Fitting | 1 | 1 |
| Screws For 2.5 inches Hard Disk (M3 x 4) | 8 *1 | 8 *1 |
| Washer Assembled Screws (M3 x 8 Black) | 1 | 1 |
| Power Supply Connector Complete Set | | |
| Power Connector | 1 | 1 |
| Contact | 4 | 4 |
| Cable Tie for USB/Audio Cable | 1 | 1 |
| Cable Tie for DisplayPort Cable | 1 | 1 |
| Product Guide | 1 | 1 |
| AC adapter Complete Set | | |
| AC adapter | 1 *2 | 1 *2 |
| AC power cable | 1 *3 | 1 *2 |

*1 The number of items packed in the OS pre-installed type is different since some of them are already equipped to the Mail Body.
 With 1 disk : 4pcs, With 2 disks : 0pcs

*2 Only packed in the product type with the AC adapter.

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Specification

Function Specifications

| Item | Description |
|---------------------------------------|--|
| CPU | XPT-T1000xxx: Intel® Core™ i7 Processor 7600U (2.80GHz) XPT-T1010xxx: Intel® Core™ i5 Processor 7300U (2.60GHz) |
| BIOS | BIOS (mfd. by AMI) |
| Memory | 8GB (260-pin SO-DIMM), PC4-17000 (DDR4-2133) |
| Graphics Controller | Intel® HD Graphics 620 (CPU integrated) |
| LCD type | LCD XPT-T10x0xxx: 12.1-inch TFT color LCD, XGA (1024 x 768), 16,770,000 colors XPT-T10x0Hxxx: 15-inch TFT color LCD, XGA (1024 x 768), 16,770,000 colors |
| | Backlight LED method, The ON/OFF can be controlled by software command. |
| Touch-screen *1 *2 | Resolution 4096×4096 (emulated in 1024×768 mode) |
| | Detection method Five-wire resistive film analog method |
| | Connection Internal serial port |
| System resolution | DVI-D 800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,920 x 1,080, 1,920 x 1,200 (16,770,000 colors) |
| | DisplayPort 800 x 600, 1,024 x 768, 1,152 x 864, 1,280 x 600, 1,280 x 720, 1,280 x 800, 1,280 x 960, 1,280 x 1,024, 1,360 x 768, 1,366 x 768, 1,400 x 1,050, 1,440 x 900, 1,600 x 900, 1,600 x 1,200, 1,680 x 1,050, 1,790 x 1,344, 1,856 x 1,392, 1,920 x 1,080, 1,920 x 1,200, 1,920 x 1,440, 2,048 x 1,152, 2,048 x 1,536, 2,560 x 1,440, 2,560 x 1,600, 2,560 x 1,920, 2,560 x 2,048, 3,840 x 2,160 (16,770,000 colors) |
| Audio | HD Audio compliant, LINE OUT x 1, LINE IN x 1, MIKE IN x 1 |
| SATA *3 | 2.5 inches S-ATA disk Slot-in x 2 Serial ATA 3.0 compliant support |
| LAN | Intel I210T controller 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector x 2 (supports Wake On LAN) |
| USB | USB 3.0-compliant x 4 ports USB 2.0-compliant x 2 ports |
| Serial | RS-232C 3 ports (one of the ports is used for touch-screen), Baud rate: 50 - 115,200bps |
| Hardware monitoring | Monitoring CPU temperature, board temperature, power voltage |
| Watchdog timer (WDT) | Software programmable, 255 level (1sec - 255sec) Time up allows reset shutdown or external output. |
| Real Time Clock | Lithium backup battery life: 10 years or longer The real-time clock is accurate within ±3 minutes (at 25°C) per month (CPU built-in RTC). |
| Power Management | Power management setup via BIOS Power On by Ring/Wake On LAN Supports ACPI Power management |
| Interface | Display DVI-D x 1 (25-pin DVI-D connector), Display Port x 1 |
| | Audio LINE OUT: 3.5p Stereo mini jack, Full-scale output level 1.2Vrms (Typ) LINE IN: 3.5p Stereo mini jack, Full-scale output level 1.4Vrms (Typ) MIC IN: 3.5p Stereo mini jack, Full-scale input level 1.4Vrms (Typ) |
| | Serial ATA slot Slot-in 2.5 inches SATA hard disk x 2 |
| | LAN 2-port (RJ-45 connector) |
| | USB USB3.0 compliant 4port (TYPE-A connector) USB2.0 compliant 2port (TYPE-A connector) |
| | RS-232C 2-port (9pin D-SUB connector (male)) |
| Power supply | Rated input voltage 12 - 24VDC *4 |
| | Input voltage range 10.8 - 31.2VDC |
| | Current consumption XPT-T10x0LX: 12V 4.9A, 24V 2.6A XPT-T1000HX: 12V 4.6A, 24V 2.3A |
| | External device power supply capacity SATA slot: +5V 2A (1,000mA x 2 per slot) USB3.0 I/F: +5V 3.6A (900mA x 4 per port) USB2.0 I/F: +5V 1.0A (500mA x 2 per port) |
| Waterproofing and dust-proofing | Front part conforming to IP65 (Use the packing supplied) |
| Cutting dimensions of the screen (mm) | XPT-T1000LX: 303(W) x 243(H) XPT-T1000HX: 358(W) x 289(H) XPT-T1010LXC: 331(W) x 272(H) |
| Physical dimensions (mm) | XPT-T1000LX: 316(W) x 73(D) x 256(H) XPT-T1000HX: 373(W) x 73(D) x 304(H) XPT-T1010LXC: 346(W) x 73(D) x 287(H) (Not including the attachment fittings or protrusions) |
| Weight | XPT-T1000LX: 4.2kg (approx.) XPT-T1000HX: 5.1kg (approx.) XPT-T1010LXC: 約 4.8kg (Not including the attachment fittings) |

*1 Accuracy is within the error of 1.5% for the periphery of the touchable area, and the other areas are within 1%.
*2 When using Windows 10, the mouse cursor is not displayed if the mouse device is not connected. The virtual mouse driver is required to display the cursor. Please download it from the CONTEC website.
*3 The capacity of storage device in the OS pre-installed type is a value when 1GB is calculated by 1 billion bytes. The capacity that can be recognized from OS might be displayed less than the actual value.
*4 Use a power cable shorter than 3m.

Installation Environment Requirements

| Item | Description |
|--|---|
| Operating temperature | 0 - 45°C |
| Operating Humidity | -10 - +60°C |
| Non-operating ambient temperature | 10 - 90%RH (No condensation) |
| Non-operating ambient humidity | 10 - 90%RH (No condensation) |
| Floating dust particles | Not to be excessive |
| Corrosive gases | None |
| Line-noise resistance | Line noise AC Line /±2kV *5, Signal Line/±1kV (IEC61000-4-4 Level3, EN61000-4-4 Level3) |
| | Static electricity resistance Touch /±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Air /±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3) |
| Vibration resistance (The product alone) | Sweep resistance (1) HDD built-in type (when current is applied): 10 - 50Hz/0.5G 25minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant) (2) HDD built-in type (when current is not applied) and other types: 10 - 57Hz/semi-amplitude vibration 0.075mm, 57 - 150Hz/1.0G 40minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant) |
| | Impact resistance 10G half-sine shock for 11ms in X, Y, and Z directions (JIS C 60068-2-27-compliant, IEC 60068-2-27-compliant) |
| Grounding | Class D grounding, SG-FG / continuity |
| Standard | VCCI Class A, FCC Class A CE Marking (EMC Directive Class A, RoHS Directive), UKCA |

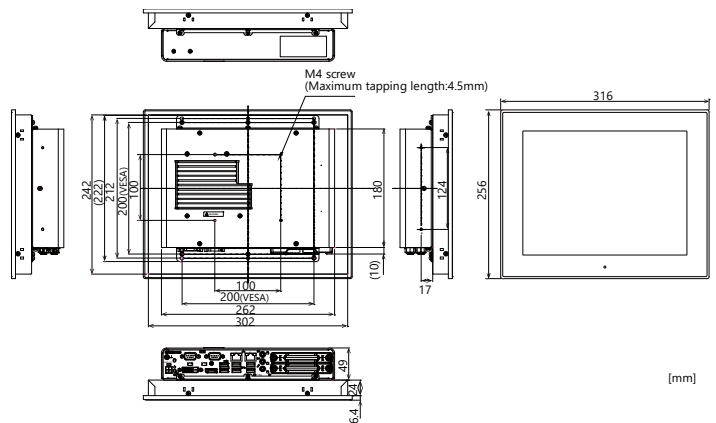
*5 When AC adapter "PWA-90AWD1" is used.

Supported OS

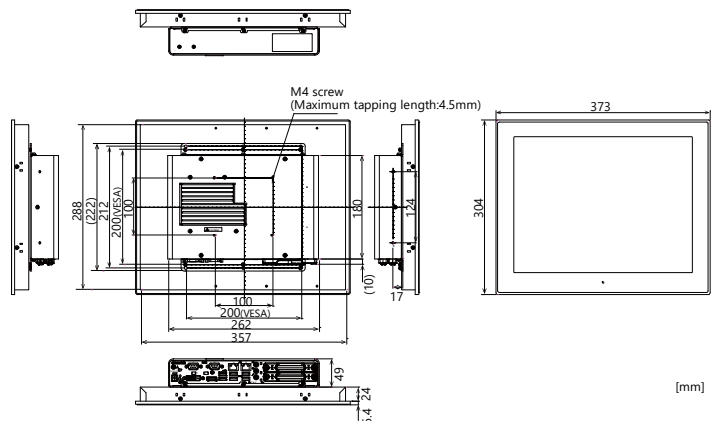
- Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)

Physical Dimension

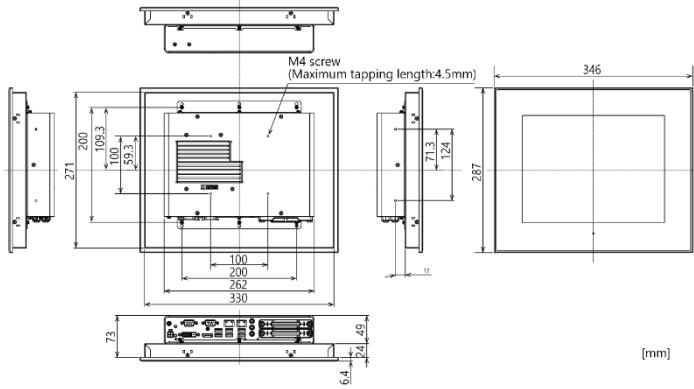
XPT-T1000LX [12.1-inch model]



XPT-T1000HX [15-inch model]

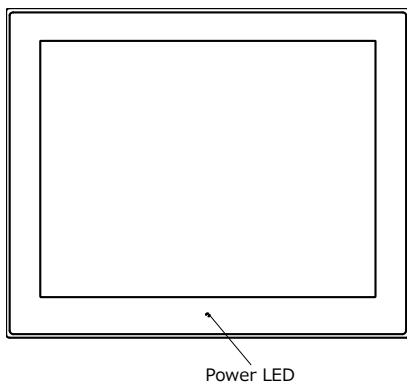


XPT-T1010LXC [12.1inch(PT-955LXC compatible) model]

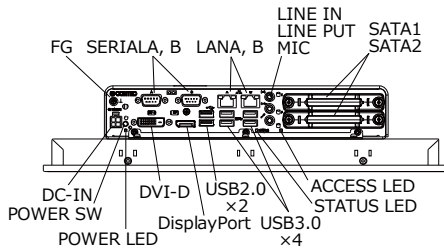


Nomenclature of Product Components

Front



Display Screen Bottom



Component Function

| Name | Function |
|------------------------------|---|
| Front | |
| POWER LED | Power ON display LED |
| Display Screen Bottom | |
| POWER SW | PC Power switch |
| POWER LED | Power ON display LED |
| ACCESS LED | SATA disk access display LED |
| STATUS LED | Status LED |
| DC-IN | DC power input connector |
| LINE IN | Line in (3.5p PHONE JACK) |
| LINE OUT | Line out (3.5p PHONE JACK) |
| MIC IN | Mic in (3.5p PHONE JACK) |
| LAN A | Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector |
| LAN B | Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector |
| USB 3.0 | USB 3.0 port connector x4 |
| USB 2.0 | USB 2.0 port connector x2 |
| SERIAL A | Serial port A connector (9-pin D-SUB male) |
| SERIAL B | Serial port B connector (9-pin D-SUB male) |
| DVI-D | Display (25-pin female) |
| DisplayPort | Display (20-pin female) |
| SATA1 | 2.5-inch HDD/SSD sbt |
| SATA2 | 2.5-inch HDD/SSD sbt |

Optional Products

| Item | Model | Description |
|--------------------------|------------------|--|
| AC adapter | PWA-90AWD1 | Switching AC Adapter (12VDC 75A) |
| Storage | PC-HDD100GS-2 *1 | 2.5-inch SATA HDD 100GB |
| | SSD-256GS-2M | 2.5-inch SATA SSD 256GB (MCL) |
| | SSD-256GS-2TP | 2.5-inch SATA SSD 256GB (TCL) |
| Screen protective sheets | IPC-CV12 | 12.1-inch screen protective sheets (10 sheets) |
| | IPC-CV15 | 15-inch screen protective sheets (10 sheets) |

*1 Not available for XPT-T1010LXC-1230010

CAUTION

If a product other than our optional one is used, the normal operation may be impaired or the functions may be limited.

Note that the sheets may not protect the screen because it is a few millimeters smaller than the screen size.

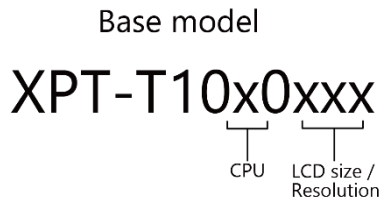
| Protective sheets | | XPT-T1000x Series | |
|-------------------|-----------------|-------------------|------------------|
| Model | Sheet size (mm) | Model | Screen size (mm) |
| IPC-CV12 | 250.0 x 188.0 | XPT-T1000LX | 249.0 x 187.5 |
| IPC-CV15 | 308.0 x 232.0 | XPT-T1000HX | 307.4 x 231.3 |

* Visit the CONTEC website for the latest optional products.

Product Lineup

This product is offered as a BTO model with customizable LCD size, OS, storage devices, and RAID configuration according to your needs, or as a pre-configured standard model.

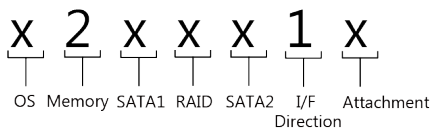
BTO MODEL



Base

| Model | CPU | LCD size / Resolution |
|--------------|-------------------------|---|
| XPT-T1000LX | Core i7 7600U processor | 12.1inch / XGA(1024 x 768) |
| XPT-T1000HX | | 15inch / XGA (1024 x 768) |
| XPT-T1010LXC | Core i5 7300U processor | 12.1inch / XGA(1024 x 768) (PT-955LXC compatible) |

Type



The list of BTO model configuration

| Base Model | Type | | | | | | | | | | | | | |
|-------------|------|-------------------------------------|--------|-----|----------|----------------|------|---------------|----------|----------------|---------------|----------|------------|---------------|
| | OS | | Memory | | SATA1 *1 | | RAID | | SATA2 *2 | | I/F Direction | | Attachment | |
| XPT-T1000LX | 0 | None | 2 | 8GB | 0 | None | 0 | None | 0 | None | 1 | Vertical | 0 | None |
| | | | | | 1 | SSD(MLC) 256GB | | | 1 | SSD(MLC) 256GB | | | | |
| XPT-T1000HX | 1 | Windows 10 IoT Enterprise 2019 LTSC | 2 | 8GB | 2 | HDD 100GB | 2 | Software RAID | 2 | HDD 100GB | 1 | Vertical | 1 | AC adapter *3 |
| | | | | | 3 | SSD(TLC) 256GB | | | 3 | SSD(TLC) 256GB | | | | |

- *1 OS is already installed.
The capacity of the disk in the OS pre-installed type is a value when 1GB is calculated by 1 billion bytes.
The capacity that can be recognized from OS might be displayed less than the actual value.
- *2 The disk is quipped in SATA2 slot when selecting RAID. The same type of disks are quipped in SATA1 and SATA2 slots.
- *3 The attachable AC adapter is the "PWA-90AWD1 (Input :100-240VAC, Output:12VDC 7.5A).

Standard MODEL

12.1" XGA (1024 x 768) with Core i7 7600U processor model

| Model | OS | Memory | SATA1 | RAID | SATA2 | Attachment | |
|---------------------|-------------------------------------|--------|-----------------|------|-----------------|-----------------|---------------|
| XPT-T1000LX-0230010 | None | 8GB | None | None | None | None | |
| XPT-T1000LX-0230011 | | | | | | AC adapter *1 | |
| XPT-T1000LX-0230310 | | | | | SSD (TLC) 256GB | None | |
| XPT-T1000LX-0230311 | | | | | | AC adapter *1 | |
| XPT-T1000LX-1230010 | Windows 10 IoT Enterprise 2019 LTSC | 8GB | SSD (TLC) 256GB | None | None | None | |
| XPT-T1000LX-1230011 | | | | | | AC adapter *1 | |
| XPT-T1000LX-1230310 | | | | | SSD (TLC) 256GB | None | |
| XPT-T1000LX-1230311 | | | | | | AC adapter *1r | |
| XPT-T1000LX-1232310 | | | | | Software RAID | SSD (TLC) 256GB | None |
| XPT-T1000LX-1232311 | | | | | | | AC adapter *1 |

*1 The attachable AC adapter is the "PWA-90AWD1 (Input :100-240VAC, Output:12VDC 7.5A).

15" XGA (1024 x 768) with Core i7 7600U processor model

| Model | OS | Memory | SATA1 | RAID | SATA2 | Attachment | |
|---------------------|-------------------------------------|---------------|-----------------|------|-----------------|---------------|---------------|
| XPT-T1000HX-0230010 | None | 8GB | None | None | None | None | |
| XPT-T1000HX-0230011 | | | | | | AC adapter *1 | |
| XPT-T1000HX-0230310 | | | | | SSD (TLC) 256GB | None | |
| XPT-T1000HX-0230311 | | | | | | AC adapter *1 | |
| XPT-T1000HX-1230010 | Windows 10 IoT Enterprise 2019 LTSC | | SSD (TLC) 256GB | | None | None | None |
| XPT-T1000HX-1230011 | | | | | | | AC adapter *1 |
| XPT-T1000HX-1230310 | | | SSD (TLC) 256GB | | None | None | None |
| XPT-T1000HX-1230311 | | | | | | | AC adapter *1 |
| XPT-T1000HX-1232310 | | Software RAID | | None | None | None | |
| XPT-T1000HX-1232311 | | | | | | AC adapter *1 | |

*1 The attachable AC adapter is the "PWA-90AWD1 (Input :100-240VAC, Output:12VDC 7.5A).

12.1" (PT-955LXC compatible) XGA (1024 x 768), with Core i5 7300U processor model

| Model | OS | Memory | SATA1 | RAID | SATA2 | Attachment |
|----------------------|-------------------------------------|--------|-----------------|------|-------|------------|
| XPT-T1010LXC-1230010 | Windows 10 IoT Enterprise 2019 LTSC | 8GB | SSD (TLC) 256GB | None | None | None |