

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 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.

- 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. *1

- 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 *2 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 system alteration.

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

*2 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.

This product is a fan-less, high-performance, industrial-use PANEL computer that is equipped with the 7th-generation Intel® Core™ i7-7600U 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 June, 2022.

Packing List

	XPT-T1000LX	XPT-T1000HX
	[12.1" model]	[15" model]
Name	Pcs.	Pcs.
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
IPC Precaution List	1	1
Warranty Certificate	1	1
Serial Number Label	1	1
Royalty Consent Contract (OS)	1 *2	1 *2
Recovery Disk	1 *2	1 *2
AC adapter Complete Set		
AC adapter	1 *3	1 *3
AC power cable	1 *3	1 *3
User's Guide	1 *3	1 *3

*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 OS pre-installed.

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

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Specification

Function Specifications

Item		Description	
		XPT-T1000LX	XPT-T1000HX
CPU		Intel® Core™ i7 Processor 7600U (2.80GHz)	
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	12.1-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	4096x4096 (emulated in 1024 x 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	12V 4.9A, 24V 2.6A	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)		303(W) x 243(H)	358(W) x 289(H)
Physical dimensions (mm)		316(W) x 73(D) x 256(H) (Not including the attachment fittings or protrusions)	373(W) x 73(D) x 304(H) (Not including the attachment fittings or protrusions)
Weight		4.2kg (approx) (Not including the attachment fittings)	5.1kg (approx) (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 (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	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

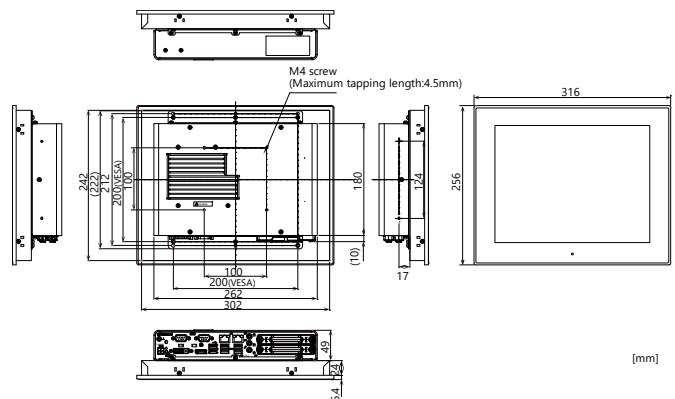
*5 When AC adapter "ACAP12-06A" is used.

Supported OS

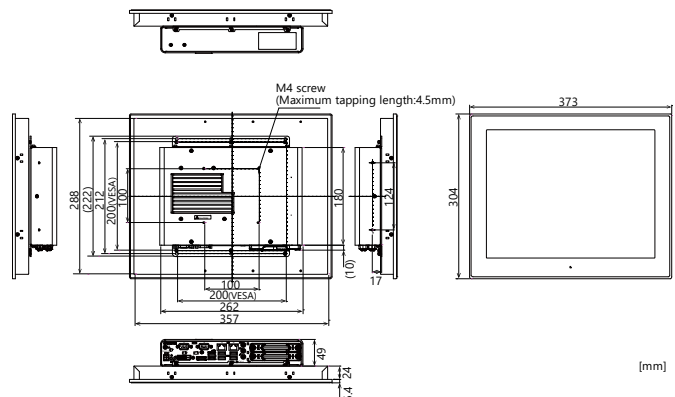
- Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)

Physical Dimension

XPT-T1000LX [12.1-inch model]

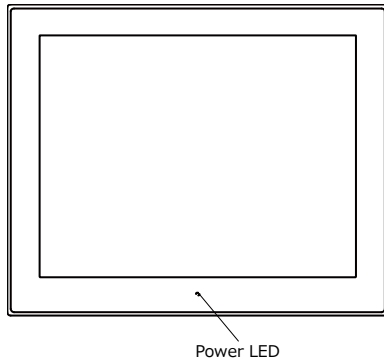


XPT-T1000HX [15-inch model]

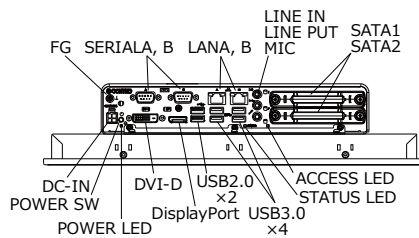


Nomenclature of Product Components

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 (3.5φ PHONE JACK)
LINE OUT	Line out (3.5φ PHONE JACK)
MIC IN	Mic in (3.5φ 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 slot
SATA2	2.5-inch HDD/SSD slot

List of Options

Item	Model	Description
AC adapter	ACAP12-06A	Switching AC Adapter (12VDC 7A)
	PWA-90AWD1	Switching AC Adapter (12VDC 7.5A)
Storage	PC-HDD100GS-2	2.5-inch SATA HDD 100GB
	SSD-256GS-2M	2.5-inch SATA SSD 256GB
Screen protective sheets	IPC-CV12	12.1-inch screen protective sheets (10 sheets)
	IPC-CV15	15-inch screen protective sheets (10 sheets)

CAUTION

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

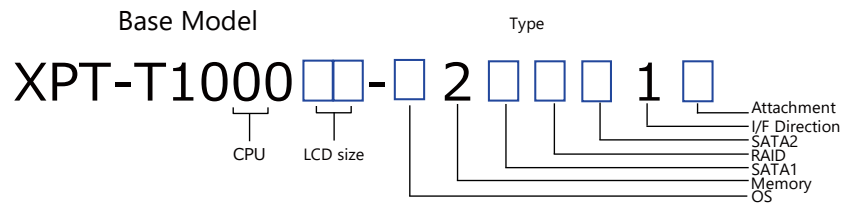
Note that the sheets may not protect the screen because it is a few millimeters smaller than the screen size.

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

The XPT-T1000 series provide the BTO style, and the items such as the size of LCD, storage, and RAID can be customized as required.



The list of Selectable items

Item	No.	Description
Base model		
CPU	-	Core i7 7600U Processor
LCD size	LX	12inch
	HX	15inch
Type		
OS	0	None
	1	Windows 10 IoT Enterprise 2019 LTSC
Memory	2	8GB
SATA1 *1	0	None
	1	SSD(MLC) 256GB
	2	HDD 100GB
RAID	0	None
	2	Software RAID
SATA2 *2	0	None
	1	SSD(MLC) 256GB
	2	HDD 100GB
I/F Direction	1	Vertical
Attachment	0	None
	1	AC adapter *3

*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).