Panel Computer, Fanless
Atom x6413E, 10.1" WXGA, 12 - 24VDC input

PT-D10WB-300 Series

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

This product is a liquid crystal integrated all-in-one computer, equipped with a 10.1-inch (WXGA 1280 × 800) touch screen display (capacitive type). It can be used for a wide range of applications, including as a control panel for medical devices or test equipment instead of a PC, or as a desk-mounted touch-type reception or authentication terminal.

This product is equipped with a built-in UPS battery that can operate for 5 minutes or more in the case of power failure such as a power outage and momentary blackout, contributing to improved system stability and reliability by being able to automatically shut down the OS using the included utility software.

Additionally, the angle of the display can be adjusted, and if pressed forward 90° the display can be closed completely, much like a laptop computer. In addition to desktop mounting using rubber feet (included), the product can be screwed to a device, fixing it like an embedded computer.

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* Visit the CONTEC website to check the latest details in the document.
* The information in the data sheets is as of February 2024.

Features

- Installable computer with desktop-type touch screen
A panel computer equipped with a 10.1-inch (WXGA 1280 × 800) touch screen display that can either be mounted on a desktop using rubber feet (included) or screwed to a device, fixing it like an embedded computer. The angle of the display can be adjusted, and it is possible to close the display like a laptop computer by pressing forward 90°.

- Safe even if power is interrupted. UPS backup power supply, OS automatic shutdown function
A backup power supply (nickel-metal hydride secondary battery) is built-in to the computer, protecting the system from sudden shutdown caused by unintended power interruption such as a power outage and momentary blackout. OS automatic shutdown utility software is also included.

- Abundant expansion interface matched with device incorporation
Equipped with an abundant interface, including USB2.0 × 5, LAN × 2, and COM (RS-232C) × 3. Peripheral equipment for professional use, such as barcode readers or thermal printers, can be connected directly. Storage can also be easily exchanged from the side.

- Capacitive touch screen adopted
It is tuned to be operable with the use of rubber gloves, so there is no problem using it in places where gloves are required.

- Fan-less design that reduces maintenance and inspection work
This product's spindle-less design eliminates CPU fan, and relieves the concern about dust or foreign matter to get into the product. The using parts that degrade over time is minimized to facilitate maintenance.

Specification

Function Specifications

Item		Description
CPU		Intel Atom® Processor x6413E 1.5GHz
BIOS		BIOS (mfd. by AMI)
Memory		8GB(260 pin SO-DIMM), PC4-25600(DD4-3200)
Graphic controller		Intel® UHD Graphics (built-in CPU)
LCD type	LCD type	10.1-inch TFT color LCD, WXGA (1280 x 800)
	Backlight	LED method, The ON/OFF software can control.
Touch screen	Resolution	WXGA (1280 x 800)
	Detection method	Capacitive type, 10 points input
	Connection	Internal USB port
Audio		HD Audio compliant Internal ceramic speaker (monaural)
SATA *1		1 slot (2.5" S-ATA slot) Built-in SSD (128GB, 1 partition)
LAN		Intel I210IT controller 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector x 2 (supports Wake On LAN)
USB		Type-A controller USB2.0-compliant x 5 port
Serial		9pin D-SUB connector [male] RS-232C (general-purpose) : 5port (two of the ports is used for internal), Baud rate : 50 - 115,200bps
Security (TPM)		TCG TPM2.0
Hardware monitoring		Monitoring CPU temperature, board temperature, power voltage
Watchdog timer		Software programmable ,255 level (1sec - 255sec) Time up allows reset
RTC/CMOS		Lithium backup battery life: 10 years or more 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, Wake On LAN, Supports ACPI Power management
Rated input voltage		12 - 24VDC
Range of input voltage		10.8 - 31.2V
Power consumption		12V 3.2A (Max.), 24V 1.6A (Max.)
External device power supply capacity		SATA I/F : +5VDC 1A USB2.0 I/F : +5V : 2.5A (500mA x 5) *2
UPS Battery	Type	Ni-MH battery
	Nominal voltage	6V
	Nominal capacity	1,000mAh
	Backup time	Over 5 minutes
Physical dimensions (mm)		254.0(W) x 130.0(H) x 228.6(D) (Not including protrusions)
Weight		2.0kg approx.

*1　It is already built into the product.　The capacity that can be recognized from OS might be displayed fewer than an actual value.
*2　When the battery is operated, the power supply to the rear 4 USB ports is stopped.

Environment Requirements

Item		Description
Operating Temperature *3		0 - 35°C
Storage Temperature *4		-10 - +50°C (within 30 days) -10 - +40°C (within 90 days) -10 - +30°C (within 1year)
Humidity		10 - 85%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line / ±2kV, Signal line / ±1kV *5 (IEC61000-4-4 Level 3, EN61000-4-4 Level 3)
	Static electricity resistance	Contact discharge : ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Air discharge : ±8kV (IEC61000-4-2 Level 3, EN61000-4-2 Level 3)
Vibration resistance	Sweep resistance	0 - 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)
Shock 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

*3　For more details on this, refer to "Installation Requirements".
*4　Storing in high temperature environments for long periods of time greatly affects the life of the nickel-metal hydride secondary battery. Make sure to store at the lowest temperature possible.
*5　It is when the product is used with bundled AC adapter.

AC Adapter specifications

Item	Description
Rated input voltage	100VAC to 240VAC (continuous input), 50 to 60Hz
Permissible input voltage	90VAC to 264VAC (continuous input), 50 to 60Hz
Input current	1.7A Max. (AC IN 90V)
Rated output voltage	+19VDC ±5%
Rated output current	3.42A (Max.)
Permissible momentary blackout	5ms or less
Dielectric strength (between Input P and S)	3.0kVAC for one minute
Insulation resistance (between P and S)	Greater than 20MΩ (500VDC)
Length of cable	AC Power cable: 1.8m, DC cable: 1.2m
Input Plug Shape	AC Code : IEC60320-C5, AC Inlet : IEC60320-C6
External dimensions (mm)	46 (W) x 108 (D) x 30 (H) (not include projection of cable)
Weight	Main body: 210g, AC power cable: 180g
MTBF *6	100,000H (temperature 25°C)

*6　Estimates of MTBF and Longevity are not guaranteed but are for reference only.

Included Items

Product ...1
AC adapter...1
AC power cable (100VAC, 3pin)...1 *1 *2
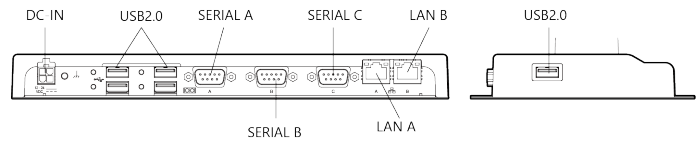Rubber foot...4
M4 screw...1
M3 screw...4
Product Guide ...1

*1　This AC power cable is for the voltage of the 100VAC or less. It might be necessary to get a particular cable to match the power voltage or outlet shape that you are using.
*2　Do not use this AC power cable with any devices except for a supplied AC adapter.
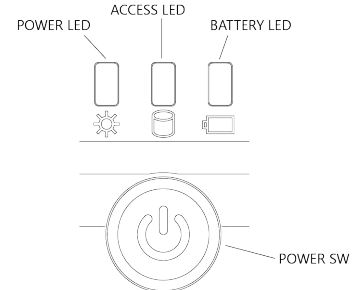
Supported OS

Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese / English / Chinese / Korean)
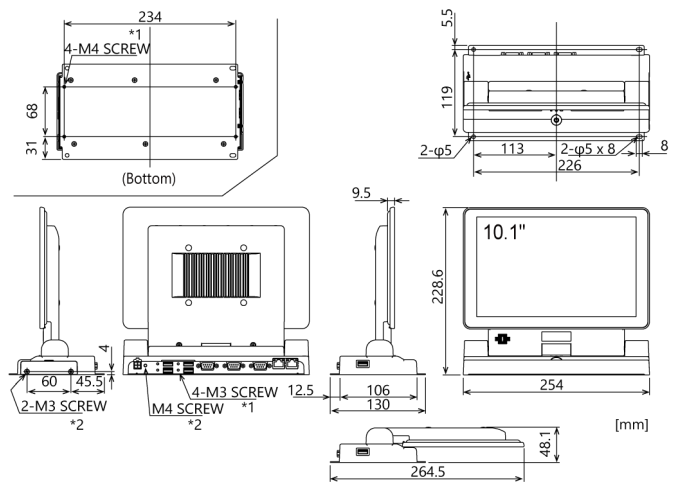
Nomenclature Of Product Components

External I/F

Operation / Display section

Name	Function
DC-IN	DC power connector / terminal
POWER LED	Power ON display LED
ACCESS LED	SATA device access display LED
BATTERY LED	Battery Status LED
POWER-SW	Power switch
USB2.0	USB2.0 port TYPE-A connector x 5
LAN A	Ethernet 1000BASE-T/100BASE-TX/10BASE-T, RJ-45 connector
LAN B	Ethernet 1000BASE-T/100BASE-TX/10BASE-T, RJ-45 connector
SERIAL A	Serial port A connector (9pin D-SUB, male)
SERIAL B	Serial port B connector (9pin D-SUB, male)
SERIAL C	Serial port C connector (9pin D-SUB, male)

Physical Dimensions

*1 Make sure the tips of the screws do not intrude 5 mm or more from the plate surface.
*2 Make sure the tips of the screws do not intrude 8 mm or more from the plate surface.

Optional Products

Item	Model	Description
AC adapter	ACAP19-01	SWITCHING AC ADAPTER (19V 3.42A)
Keyboard	PC-KB-WHT	USB slim keyboard for PC

CAUTION

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

Product Lineup

Model	Memory	Storage	OS
PT-D10WB-300-J2320	8GB	128GB	Windows 10 IoT Enterprise 2021 LTSC 64bit (Japanese, English, Chinese, Korean)