

Panel Computer, Fanless
Atom x6413E, 10.1" WXGA, 12 - 24VDC input
PT-M10WB-300 Series



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

Features

- Contributing to reduction of running cost and promotion of energy efficiency

With the low power consumption platform Intel Atom® processor x6413E, this product achieves low power consumption while ensuring adequate performance.

- 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 x 5, LAN x 2, and COM (RS-232C) x 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.

This product is a liquid crystal integrated all-in-one computer, equipped with a 10.1-inch (WXGA 1280 x 800) touch screen display (capacitive type).

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.

- * The contents in this document are subject to change without notice.
- * Visit the CONTEC website to check the latest details in the document.
- * The information in the data sheets is as of February 2024.

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 I210 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)	168.0(W) x 50.0(H) x 258.0(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.

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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" of reference manual.
- *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
- M3 screw ...6
- M4 screw ...1
- Product Guide ...1

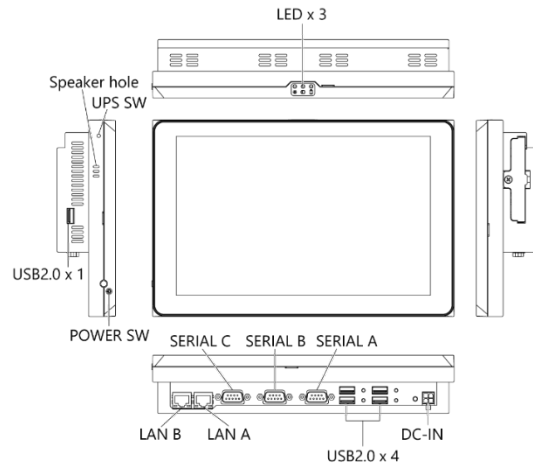
- *1 This AC power cable is for the voltage of the 100VAC or less. It might be necessary to get a particular cable to match the power voltage or outlet shape that you are using.
- *2 Do not use this AC power cable with any devices except for a supplied AC adapter.

Supported OS

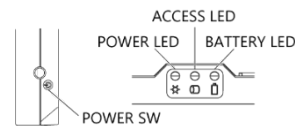
Windows 10 IoT Enterprise LTSB 2021 64bit (Japanese / English / Chinese / Korean)

Nomenclature Of Product Components

External I/F



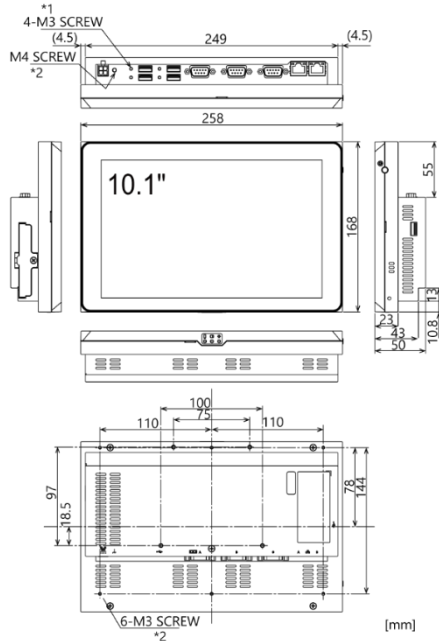
Display section



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)
UPS SW	UPS discharge stoppage switch
Speaker hole	Built-in speaker

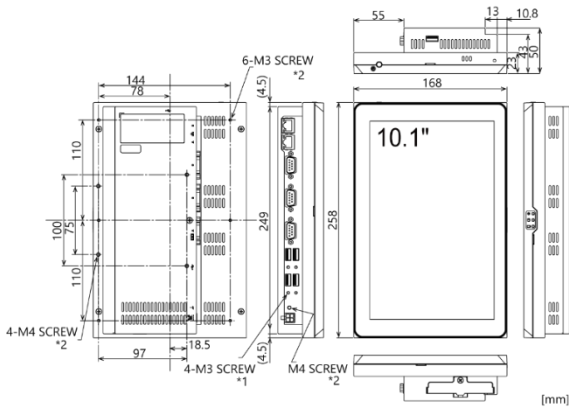
Physical Dimensions

Landscape Installation



- *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 7 mm or more from the plate surface.

Portrait Installation



- *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 7 mm or more from the plate surface.

Optional Products

Item	Model	Description
AC adapter	ACAP19-01	SWITCHING AC ADAPTER (19V 3.42A)

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-M10WB-300-J2320	8GB	128GB	Windows 10 IoT Enterprise 2021 LTSB 64bit (Japanese, English, Chinese, Korean)