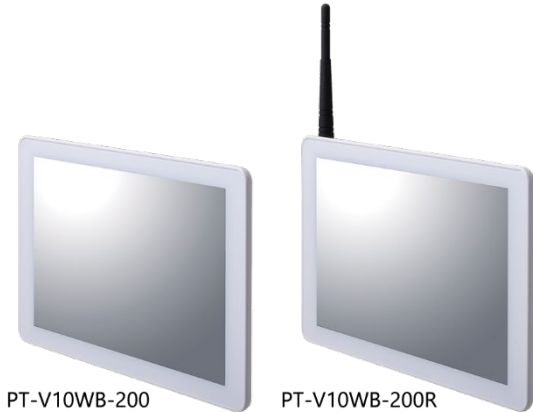PANEL-PC, Fanless
Atom E3940, 10.1" WXGA, 12 - 24VDC input
PT-V10WB-200, 210 Series
Atom E3940, 15.6" Full-HD, 12 - 24VDC input
PT-V15WB-200 Series

PT-V10WB-200   PT-V10WB-200R

* The photos show the PT-V10WB-200 and PT-V10WB-200R.
* Specifications, color and design of the products are subject to change without notice.

This product is the "All-in-One" type PC, which offers a choice of 10.1-inch size (WXGA 1280×800) or 15.6-inch size (Full-HD 1920×1080) integrated LCD touch screen.

Since only selected interfaces such as 1000BASE-T, USB 3.2 Gen1 (USB3.0), and Audio are provided, the product can be installed in a smaller space comparing to our earlier panel integrated computers.

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

* The contents in this document are subject to change without notice.
* Visit the CONTEC website to check the latest details.
* Visit the CONTEC website to check the latest OS.
* The information in the data sheets is as of October, 2022.

Features

- The compact design features flexibility in installation
With minimum interfaces such as USB3.2 Gen1 (USB3.0) x 3, LAN x 2, Audio x 1, and DisplayPort x 1 the compact size PC, (259(W)×23(D)×169(H), features flexibility in installation.

- "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. 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.

- High-security design contributes to a highly reliable system
The latest security functions such as TPM2.0 and Secure Boot, as well as CONTEC's original functions including the USB Boot Protect are provided. This product is designed with the high security required for industrial applications in mind.

- Contributing to running cost reduction and energy efficiency
Adopting the low-power platform of Intel® Atom ™ Processor E3940 achieves lower power consumption while still ensuring sufficient performance.

- 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.

- VESA standard support
Conforming to the VESA standard (75×75), the product can be set on the various types of arms or stands.

Supported OS

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

Specification

Functional Specifications

Item		Description	
		PT-V10WB-2x0	PT-V15WB-200
CPU		Intel Atom® x5-E3940 Processor 1.6GHz	
BIOS		BIOS (mfd. by AMI)	
Memory		8GB (204-pin SO-DIMM ECC on-board), PC3L-12800 (DDR3L 1600)	
Graphic controller		Intel® HD Graphics 500 (CPU integrated)	
LCD type	LCD type	10.1-inch TFT color LCD, WXGA (1280 x 800 @60Hz)	15.6-inch TFT color LCD, Full-HD (1920 x 1080 @60Hz)
	Backlight	LED method, The ON/OFF software can control.	
Touch screen	Resolution	WXGA (1280×800)	Full-HD (1920 x 1080)
	Detection method	Capacitive type, 10 points input	
	Connection	Internal USB port	
	Coating	PT-V10WB-200 : Nomal PT-V10WB-210 : Anti Fingerprint coating	PT-V15WB-200 : Nomal
External display output		DisplayPort x 1	
Audio		HD Audio compliant, LINE OUT x 1 3.5φ stereo minijack, Full-scale output level 1.1Vrms (Typ.) Built-in monaural speaker x 1	
LAN		Intel I210IT controller 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector x 2 (supports Wake On LAN)	
Wireless LAN *1		IEEE 802.11ac/a/b/g/n	
Bluetooth *1		4.2	
USB		Type-A controller USB3.2 Gen1 (USB3.0)-compliant x 3 port	
Storage		1 slot, M.2 2242, SATAIII M.2 card 64GB(MLC) on-board *2	
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 (Max.)		12V 3.0A 24V 1.5A	12V 4.0A 24V 2.0A
External device power supply capacity		USB3.2 Gen1 I/F : +5V : 0.9A x 3	

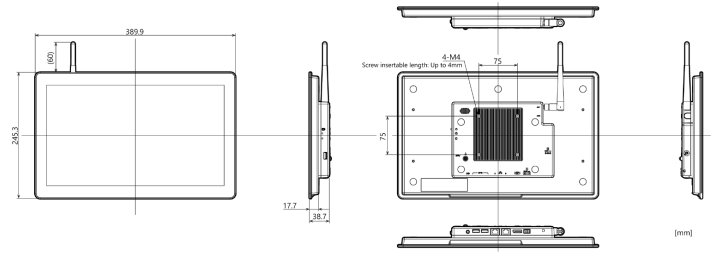| Item	Description	
	PT-V10WB-2x0	**PT-V15WB-200**
Physical dimensions (mm)	259(W) x 169(H) x 26(D) (Not including protrusions)	389.2(W) x 245.3(H) x 38.7(D) (Not including protrusions)
Weight	800g approx.	2700g approx.

*1   Wireless LAN and Bluetooth are only available in the wireless models.
*2   It is already built into the product.   The capacity that can be recognized from OS might be displayed fewer
     than an actual value.

Installation Environment Requirements

Item		Description
Operating Temperature		0 - 40°C *3
Storage Temperature		-10 - +60°C
Humidity		10 - 90%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line / ±2kV, Signal line / ±1kV (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
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive) *4, UKCA *4, CCC *4, BSMI *4, KC *4, TELEC (set with the certified wireless module) *5, UL/c-UL *6

*3   Derating occurs due to the way of installation. For more details on this, refer to "Installation Requirements".
*4   The wireless model is excluded from CE, UKCA, CCC, BSMI, KC Standard.
*5   The wireless module is set only in the wireless models.
*6   The wireless model is excluded from c-UL Standard.

Physical Dimensions

PT-V10WB-200/PT-V10WB-210

PT-V10WB-200R/PT-V10WB-210R

PT-V15WB-200R

PT-V15WB-200R

Included Items

Product...1

3-pin Connector for Power Supply...1

Spacer...4

Hollow Spacer...4

Cable Tie...1

Antenna...1 *1

Product Guide...1

*1   Only packed in the following product with the Wireless function model.
      PT-V10WB-2x0R-J104M05, PT-V10WB-2x0R-J104M05W19
      PT-V15WB-200R-J104M05, PT-V15WB-200R-J104M05W19

Optional Products

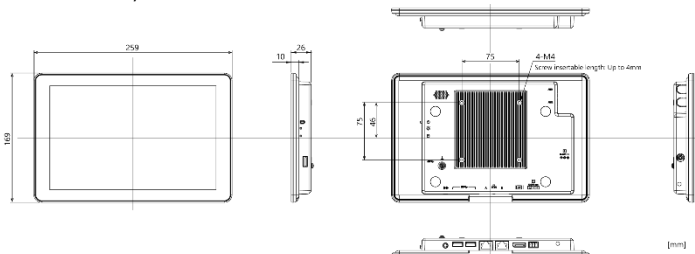| Item	Model	Description
Stand	IPC-SND-03	Desk stand
AC adapter	PWA-60AWD2	SWITCHING AC ADAPTER (24VDC 2.5A) DC jack type
Antenna extension cable	IPC-RPSMA-2	RP-SMA connector coaxial cable
Screen protective sheets	IPC-CV10W-AV	10.1-inch Anti-bacterial/Anti-viral Screen Protective Sheet (3 Piece Set)

Caution

- If a product other than our option is used, the normal operation may be impaired or the functions may be limited.
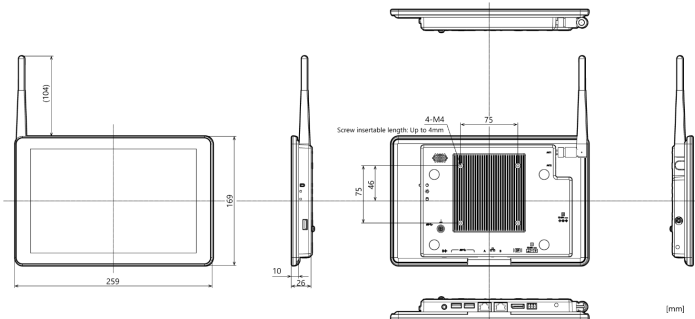- Always check the visibility and operability of the protective sheet before using it.

* Check the CONTEC's Web site for the latest information on these options.

Component Name
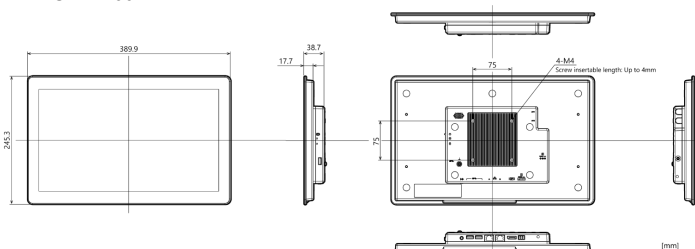
PT-V10WB-200/PT-V10WB-210
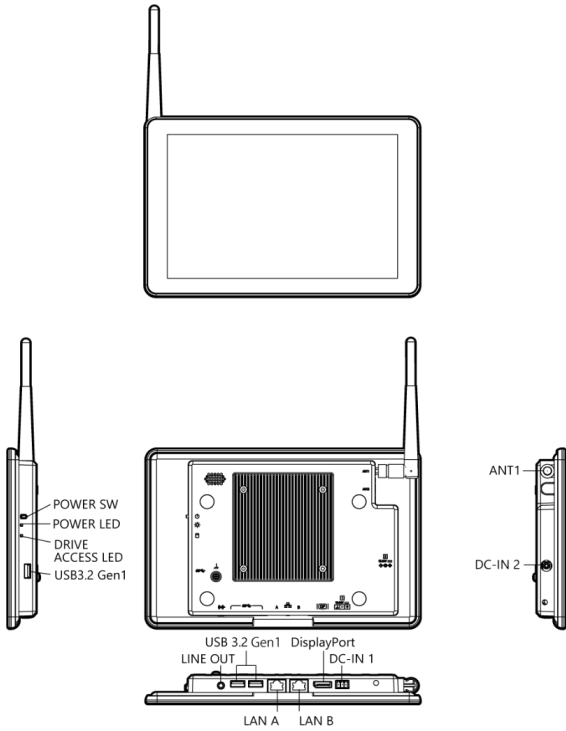
PT-V15WB-200
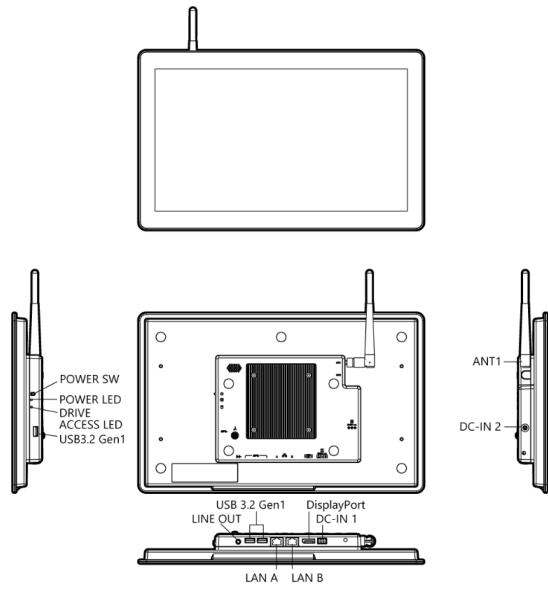
Component Function

Name	Function
DC-IN 1	DC power connector / terminal
DC-IN 2	DC power connector / jack
POWER SW	Power switch
POWER LED	Power ON display LED
DRIVE ACCESS LED	Drive access display LED
LINE OUT	Line out (3.5φ PHONE JACK)
USB3.2 Gen1	USB3.2 Gen1 (USB3.0) port, TYPE-A connector x 3
LAN A	Ethernet 1000BASE-T/100BASE-TX/10BASE-T, RJ-45 connector
LAN B	Ethernet 1000BASE-T/100BASE-TX/10BASE-T, RJ-45 connector
DisplayPort	Display (20-pin, female)
ANT1	Antenna connector (Wireless LAN / Bluetooth) *1

*1   Antenna connectors are available only on the wireless models.

Product Lineup

The product has seven models.

Model	Memory	Storage	LCD/Touch Panel	Wireless	OS
PT-V10WB-200-J104M05	8GB	64GB	10.1 inch (WXGA 1280 x 800)	Not available	None
PT-V10WB-200-J104M05W19					Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
PT-V10WB-200R-J104M05				Available	None
PT-V10WB-200R-J104M05W19					Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
PT-V10WB-210-J104M05	8GB	64GB	10.1 inch (WXGA 1280 x 800) /Touch Panel Anti Fingerprint coating	Not available	None
PT-V10WB-210-J104M05W19					Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
PT-V10WB-210R-J104M05				Available	None
PT-V10WB-210R-J104M05W19					Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
PT-V15WB-200-J104M05	8GB	64GB	15.6 inch (Full-HD 1920 x 1080)	Not available	None
PT-V15WB-200-J104M05W19					Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)
PT-V15WB-200R-J104M05				Available	None
PT-V15WB-200R-J104M05W19					Windows 10 IoT Enterprise 2019 LTSC 64bit (Japanese / English / Chinese / Korean)