STAND-PC

Product Guide

21.5-inch full HD VA panel optical 2-point multi-touch model

SPT-200A-22TR

CONTEC CO., LTD.

Thank you for purchasing this product. The product you have purchased consists of the following items.
Check, with the following list, that your package is complete.
If you find any item either missing or damaged, please contact the sales representative you purchased the product from.
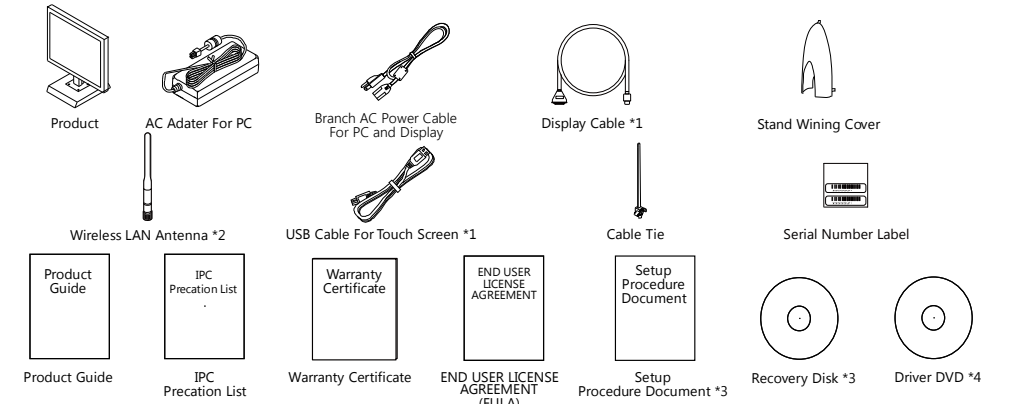For appropriate usage, be certain to read the Reference Manual before using this product.

The following manuals come with this product. Visit our website and download them by entering the model type in "Downloads". Read them before using the product.

Name	Contents	How to get
Product Guide (This sheet)	This lists the product configuration and describes the precautions	Included in the package (Printed matter)
Reference Manual	This describes the hardware aspects such as functions and settings.	Download (PDF)

Download https://www.contec.com/download/

1. About the product

This product is an "All-in-One" PC with an integrated high-performance touch screen.
21.5-inch size of the display monitor is pre-installed, and various extendable interfaces such as HDMI, DisplayPort,1000BASE-T, Wireless LAN, USB3.0, Serial, and Audio are provided. As a large-screen display terminal you can touch with your finger and operate like a tablet PC, this product can be used to control production lines, provide work instructions, manage access, in addition to operate industrial devices through the screen.

2. Product Configuration

This product consists of the items listed below.
Check, with the following list, that your package is complete. If you discover damaged or missing items, contact your retailer.

Product | AC Adater For PC | Branch AC Power Cable For PC and Display | Display Cable *1 | Stand Wining Cover

Wireless LAN Antenna *2 | USB Cable For Touch Screen *1 | Cable Tie | Serial Number Label

Product Guide | IPC Precation List | Warranty Certificate | END USER LICENSE AGREEMENT (EULA) | Setup Procedure Document *3 | Recovery Disk *3 | Driver DVD *4

*1 Preset upon shipment
*2 Packed when selecting the wireless LAN
*3 Packed in the OS pre-installed type
*4 Packed in the OS uninstalled type

3. Safety Precautions

Understand the following definitions and precautions to use the product safely.

Safety Information

This document provides safety information using the following symbols to prevent accidents resulting in injury or death and the destruction of equipment and resources. Understand the meanings of these labels to operate the equipment safely.

⚠ **DANGER**	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ **WARNING**	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION**	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

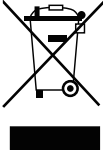### Handling Precautions

⚠ DANGER

- Always check that the power supply is turned off before connecting or disconnecting power cables.
- Do not modify the product.
- This product is not intended for use in aerospace, space, nuclear power, medical equipment, or other applications that require a very high level of reliability. Do not use the product in such applications.
- If using this product in applications where safety is critical such as in railways, automotive, or disaster prevention or security systems, please contact your retailer.
- Do not attempt to replace the battery as inappropriate battery replacement poses a risk of explosion.
  For battery replacement, contact your retailer as it must be performed as a process of repair.
- When disposing of a used battery, follow the disposal procedures stipulated under the relevant laws and municipal ordinances.
  For details on replacing the battery, refer to the Reference Manual.

⚠ CAUTION

- Do not use or store the product in a location exposed to extremely high or low temperature or susceptible to a rapid temperature change.
  Example: - Exposure to direct sun
            - In the vicinity of a heat source
- Do not use this product in extremely humid or dusty locations. It is extremely dangerous to use this product with its interior penetrated by water or any other fluid or conductive dust. If this product must be used in such an environment, install it on a dust-proof control panel, for example.
- Avoid using or storing this product in locations subject to shock or vibration.
- Do not use this product in the vicinity of devices that generate strong magnetic force or noise. Such products will cause this product to malfunction.
- Do not use or store this product in the presence of chemicals.
- To clean this product, wipe it gently with a soft cloth dampened with either water or mild detergent. Do not use chemicals or a volatile solvent, such as benzene or thinner, to prevent pealing or discoloration of the paint.
- This product's case may become hot. To avoid being burned, do not touch that section while this product is in operation or immediately after turning off the power. Avoid installation in a location where people may come into contact with that section.
- CONTEC does not provide any guarantee for the integrity of data on storage.

- Always remove the power cable from the power outlet before mounting or removing an expansion board and before connecting or disconnecting a connector.
- To prevent corruption of files, always shutdown the OS before turning off this product.
- CONTEC reserves the right to refuse to service a product modified by the user.
- In the event of failure or abnormality (foul smells or excessive heat generation), unplug the power cord immediately and contact your retailer.
- To connect with peripherals, use a grounded, shielded cable.
- Do not use any sharp-pointed object such as a mechanical pencil to touch the touch panel. Doing so may scratch the touch panel, resulting in malfunctions.
- When the surface or frame of the touch screen has become dirty, wipe it with neutral detergent. Do not wipe the touch screen with thinner, alcohol, ammonia, or a strong chlorinated solvent.
- Use your fingers to perform operations on the touch screen.
  Operations with the stylus pen on the screen might not perform well due to the pen you are using with.
- LCD may have a few bright spots that are always on or a few black spots that are always off. Color irregularity may also occur depending on the viewing angle. This however is due to the structural characteristics of the LCD; therefore, it is not a product fault.
- Be certain to use the bundled AC adapters and power cables. Also, do not use these AC adapters or power cables with any other devices.
- Burn-in on TFT Display
  "Burn-in" may occur if the same display is retained for a long time. Avoid this by periodically switching the display so that the same display is not maintained for a long time.
  * Burn-In: Phenomenon characterized by a TFT display as a result of long-time display of the same screen where a shadow-like trace persists because electric charge remains in the LCD element even after the patterns are changed.
- The backlight lifetime of the touch screen display.
  The rated life of the backlight is 40,000 hours or longer.
  *Ambient temperature25°C±5°C, I F =110mA, Drops to 50% of the initial luminance.

4. About the handling of the battery and the storage battery in EU signatory
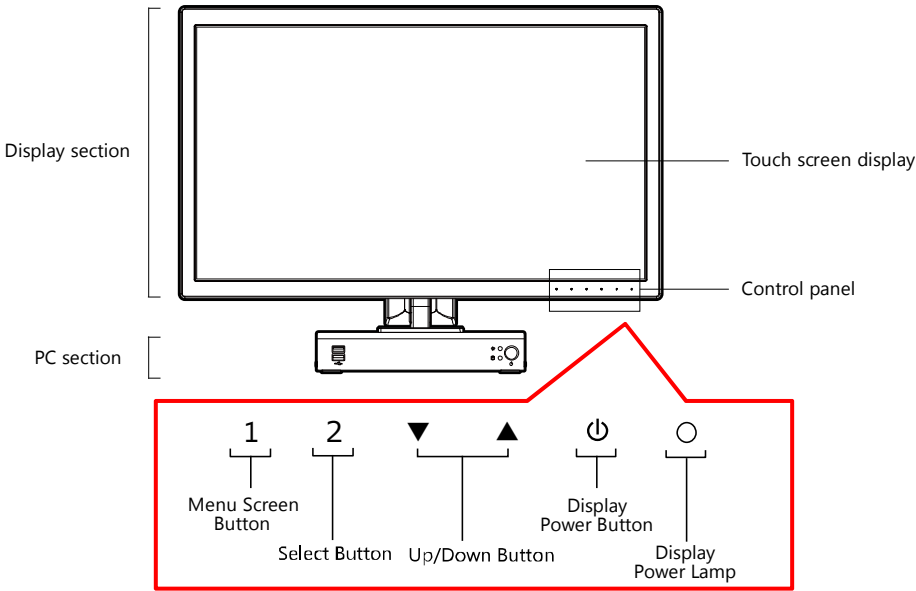

Note: This symbol mark is for EU countries only.
This symbol mark is according to the directive 2006/66/EC Article 20 Information for end-users and Annex II.

This symbol means that batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.
If a chemical symbol is printed beneath the symbol shown above, this chemical symbol means that the battery or accumulator contains a heavy metal at a certain concentration.
This will be indicated as follows:
Hg: mercury (0.0005%), Cd: cadmium (0.002%), Pb: lead (0.004%)

These ingredients may cause serious hazardous for human and the global environment.
Please refer to the Reference Manual for the detailed specification, removal, and disposal of the battery.
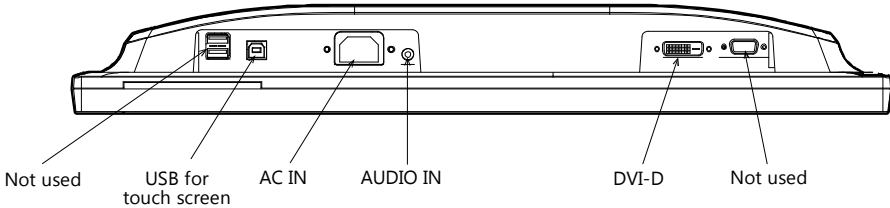
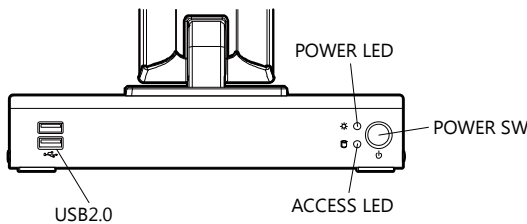## 5. Nomenclature of Product Components

[Product Front]

Display section | PC section
Touch screen display | Control panel

1 | 2 | ▼ | ▲ | ⏻ | ○
Menu Screen Button | Select Button | Up/Down Button | Display Power Button | Display Power Lamp

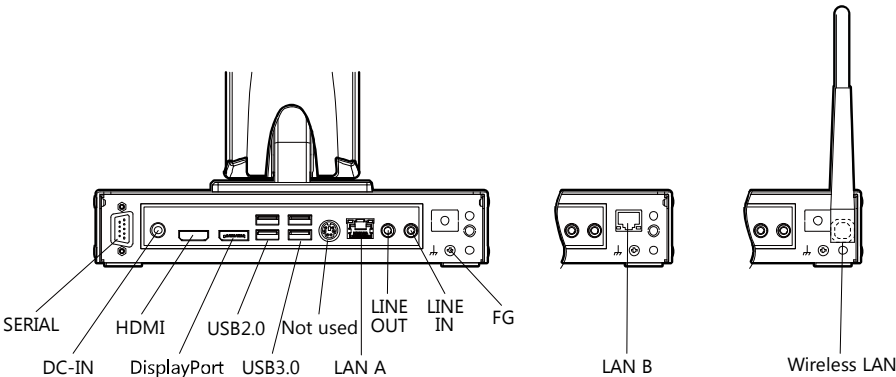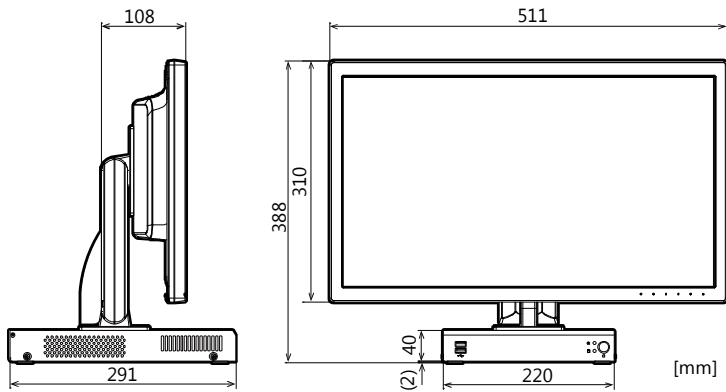| Item		Description
1	Menu Screen Button	This displays the setting menu or ends the control displayed.
2	Select Button	This displays the control setting screen of the selected menu.
▼/▲	Up/Down Button	This switches the menu or adjusts the control displayed.
⏻	Display Power Button	Display power ON/OFF
○	Display Power Lamp	Blue: ON, Orange: Power save

[Display section Bottom]

Not used | USB for touch screen | AC IN | AUDIO IN | DVI-D | Not used

[PC section Front]

POWER LED
POWER SW
USB2.0 | ACCESS LED

[PC section Rear]

SERIAL | HDMI | USB2.0 | Not used | LINE OUT | LINE IN | FG
DC-IN | DisplayPort | USB3.0 | LAN A | LAN B | Wireless LAN

6. Physical Dimensions

108 511
388 310
291 40 220 (2) [mm]

7. Specifications

◆ Function Specifications

Item		Description
CPU [Selection] *1		Intel® Core™ i5-8500T Processor (2.1GHz 6 core/6-thread) Intel® Core™ i3-8100T Processor (3.1GHz 4 core/4-thread) Intel® Celeron® G4900T Processor (2.9GHz 2 core/2-thread)
Main memory [Selection] *1		Max. 16GB, 260-pin SO-DIMM Socket x 2, PC4-21333(DDR4-2666) DDR4 SDRAM 8GB: 8GB DDR4-2666 SO-DIMM (Non-ECC) ×1 16GB: 8GB DDR4-2666 SO-DIMM (Non-ECC) ×2
Storage [Selection] *1		2.5" SATA 500GB HDD 2.5" SATA SSD 128GB M.2 SSD 128GB
Graphics	Processor built-in	Intel® HD graphics 630/610
	Video memory/ standard-resolution	Share with the main memory / 800 x 600 - 1,920 x 1,080 (digital)/ 16,770,000 colors
Display monitor	Screen type	21.5-inch wide gloss screen VA screen
	Touch screen detection system	Optical system 2-point multi touch
	Touch screen communication method	USB
	Aspect ratio	16 : 9
	Pixel pitch	0.248 x 0.248mm
	Resolution (Max.)/ Display color (Max.)	1,920 x 1,080 (60Hz) / 16,770,000 colors
	Contrast ratio (Max.)	1,000 : 1
	View angle (horizontal/vertical)	170°(Horizontal) / 160°(Vertical)
	Response time	5ms (Gray to Gray)
	Maximum luminance (with touch screen)	200d/m^2
	Dust-proof, Drip-proof	-
External interface (Display side)	Touch screen input	USB×1(Used)
	DVI	DVI-D×1(29-pin DVI connector Used)
External interface (PC side)	LAN A	1 x 1000BASE-T/100BASE-TX/10BASE-T (Wake On LAN support)
	LAN B [Selection] *1	1 x 1000BASE-T/100BASE-TX/10BASE-T *2
	Wireless LAN [Selection] *1	Wireless LAN IEEE 802.11ac / a / b / g / n
	USB	2 x USB 3.0, 4 x USB 2.0 (1 port used)
	RS-232C	1 x RS-232C 9-pin D-SUB connector (male) Baud rate : 50 - 115,200bps
	Display	1 x HDMI, (Used), 1 x DisplayPort
	Audio	HD Audio compliant, 1 x LINE OUT, 1 x LINE IN
Display side power supply (Bundled AC adapter))	Rated power supply input voltage	100 - 240VAC
	Range of input voltage	90 - 264VAC
	Power consumption	26W
PC side power supply (Bundled AC adapter)	Rated power supply input voltage	100 - 240VAC
	Range of input voltage	90 - 264VAC
	Power consumption	79W
	External device power supply capacity	USB3.0 I/F: +5VDC : 1.8A (900mA x2) USB2.0 I/F: +5VDC : 2.0A (500mA x4)
Physical dimensions (mm)		511(W) x 291(D) x 388(H) (No protrusions)
Weight		7.8kg (Excluding AC adapter)
OS		Windows 10 IoT Enterprise LTSB 2019 64bit (Japanese/English/Chinese/Korean)

*1 The type of CPU, memory, and storage are selectable. Additional LAN is available.
*2 Storage [M.2 SSD 128GB] is unavailable when wire-LAN is selected for additional LAN.

◆ Ambient specifications

Item		Description
Operating temperature		5 - 40°C
Operating humidity		20 - 80%RH (No condensation)
Storage temperature		-20 - 60°C
Storage humidity		5 - 80%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line/2KV, Signal line/1KV (EN61000-4-4Level3, IEC61000-4-4Level3)
	Static electricity resistance	Contact discharge : ±4KV(EN61000-4-2Level2,IEC61000-4-2 Level2) Atmospheric discharge : ±8KV(EN61000-4-2Level3,IEC61000-4-2 Level3)
Vibration resistance	Sweep resistance	10 - 57Hz/semi-amplitude 0.015mm, 57 - 150Hz/0.2G 40min. 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 C60068-2-27-compliant, IEC60068-2-27-compliant)
Standard		VCCI Class A, FCC Class A,