STAND-PC

21.5-inch full HD IPS panel capacitive 10-point multi-touch model

# **SPT-200A-22TP**

21.5-inch full HD VA panel optical 2-point multitouch model

# **SPT-200A-22TR**



The picture is SPT-200A-22TP.

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

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 rich, extendable interfaces such as HDMI, 1000BASE-T, wireless LAN, USB 3.1, 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.

Embedded-type chipset and CPU have been adopted. The use of readily available parts ensures the ease of the use of the product.

- \* 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 March, 2021.

# **Features**

### - Shipped to your door already assembled as an "All-in-One" PC.

The product is shipped from the factory with the display monitor, stand, PC unit pre-assembled. Just connect the cable to the PC and turn on the power to get started.

### Touch-screen display for industrial-use meets the IP54 standard (SPT-200A-22TP)

Adopted an industrial-use touch-screen display monitor of IPS style featuring enhanced visibility with wide-viewing-angle.

The product supports 10-point multi-touch and you can operate by touching the display with your finger like a tablet PC or smart phone. The front side of the display meets the IP54 standard and it ensures waterproofing and dust-proofing

#### - High-performance touch screen display. (SPT-200A-22TR)

Adopted a touch-screen display monitor featuring cost-effective achieved by VA style. It supports 2-point optical multi-touch and allows you to operate with the work-gloves you wear every day.

### - Various, extendable interfaces are provided

Unique to an industrial-use PC, various, extendable interfaces including 1000BASE-T $\times$ 2 (or 1), wireless LAN (optional), USB3.1 $\times$ 2, USB2.0 $\times$ 4, and serial (RS-232C) $\times$ 1 are provided.

#### - A low center gravity structure achieved by mounting the PC in the pedestal

Mounting the PC unit in the pedestal of the display stand achieves a low center gravity structure and makes the product stable.

The pedestal part can also be set with screws.

### - New structure housing for high performance CPU

A heat pipe and a thin CPU fan are adopted to set the high performance CPU in a limited space. The cooling structure of the duct structure that separates the air flow to the PC prevents dust and foreign matter to be inhaled into the PC. The clamshell open / close mechanism is used to access the inside a PC easily. Adding memory or performing maintenance can be done even with the display monitor is fixed.

# - Long-term product availability contributes to low-cost operation

In addition to the industrial display monitor, taking up CPU configurations can contribute to longer-term product availability.

This frees the users from operation checks or device structure changes each time PC models changes, and it also reduces the running costs of development or verification. With the SPT-200A-22TP, display monitor section is also ensured longer-term product availability by adopting an industrial-use display.

#### - Pre-installation of OS to support the latest integrated type

You can select whether to pre-install Windows 10 IoT Enterprise LTSC 2019 64-bit edition that supports Japanese, English, Chinese, or Korean. Unlike Windows10 commonly used, long-term availability with the same specifications are guaranteed. Moreover, Write Filter, one of the additional functions, enables the system to operate with Read-only.

# **Packing List**

- Product...1
- AC Adapter for PC...1
- Branch AC Power Cable For PC and Display...1
- Display Cable...1 \*1
- Stand Wiring Cover...1
- AC Adapter For Display...1 \*5
- Wireless LAN Antenna...1 \*2
- USB Cable For Touch Screen...1 \*1
- Cable Tie...2
- Serial Number Label...1
- Product Guide...1
- IPC Precaution List...1
- Warranty Certificate...1
- End User License Agreement (EULA)...1 \*3
- Setup Procedure Document...1 \*3
- Recovery Media...2\*3
- Driver DVD...1 \*4
- AC Adapter Mount Parts...2 \*6
- Brackets (with four screws)...1 \*6
- \*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
  \*5 Packed in the SPT-200A-22TP
- \*6 Packed if the SPT-200A-22TP

# Specifications

# **Function Specifications**

	Item	SPT-200A-22TP	SPT-200A-22TR
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) x 1 16GB: 8GB DDR4-2666 SO-DIMM(Non-ECC) x 2	
Storage [Selecti	on] *1	2.5" SATA 500GB HDD 2.5" SATA SSD 128GB M.2 SSD 128GB	
Graphics	CPU built-in	Intel® UHD graphics 630 / 610	
·	Video memory/ standard-resolution	Share with the main memory / 800×600 - 1,920×1,080 (digital)/ 16,770,000 colors	
Display	Panel type	21.5-inch wide Gloss screen IPS panel	21.5-inch wide Gloss screen VA panel
	Touch screen detection system	Projected capacitive touch screen 10-Point multi touch	Optical system 2-point multi touch
	Touch screen communication method	USB	
	Aspect ratio	16:9	
	Pixel pitch	0.247 x 0.247 mm	0.248 x 0.248 mm
	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)	178°(Horizontal) / 178°(Vertical)	170°(Horizontal) / 160°(Vertical
	Response time	8ms (Gray to Gray)	5ms (Gray to Gray)
	Maximum luminance (with touch screen)	225 cd/m <sup>2</sup>	200 cd/m <sup>2</sup>
	Dust-proof, Drip-proof,	Display front side IP54- compliant	-
External interface	Touch screen input	USB x 1 (Used)	
(Display)	DVI	DVI-D x 1 (29-pin DVI connector Used)	
External interface	LAN A	1 x 1000BASE-T/100BASE-TX/10BASE-T (Wake On LAN support)	
(PC)	LAN B [Selection] *1	1 x 1000BASE-T/100BASE-TX/10BASE-T *2	
	Wireless LAN [Selection] *1	Wireless LAN IEEE 802.11 ac/a/b/g/n	
	USB	2 x USB 3.1 Gen1 standard, 4 x USB 2.0 standard (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 MIC IN	
Display side power supply (Bundled AC	Rated power supply input voltage	100 - 240VAC	
adapter)	Range of input voltage	90 - 264VAC	
	Power consumption	48W	26W
PC side power supply (Bundled AC	Rated power supply input voltage	100 - 240VAC	
adapter)	Range of input voltage	90 - 264VAC	
	Power consumption	79W	
	External device power supply capacity	USB3.1: +5VDC 1.8A (900mA x 2) USB2.0: +5VDC 2.0A (500mA x 4)	
Physical dimensions (mm)		517(W) x 291(D) x 404(H) (No protrusions)	511(W) x 291(D) x 388(H) (No protrusions)
Weight		7.7kg (Excluding AC adapter)	7.8kg (Excluding AC adapter)
Operating system [Selection] *1		None Windows 10 IoT Enterprise LTSB 2 (Japanese/English/Chinese/Korea Windows 10 IoT Enterprise 2019 (Chromium) (Japanese/English/Cl	n) LTSC 64bit with Microsoft Edge

# **Ambient specifications**

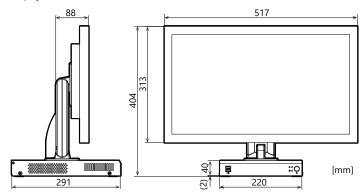
Item		Description
Operating temperature		5 - 40°C
Operating Humidity		20 - 80%RH (No condensation)
Storage temperature		-20 - +60°C
Operating Humidity		5 - 80%RH (No condensation)
Floating dust particles		Not to be excessive
Corrosive gases		None
Line-noise resistance	Line noise	AC line/±2KV, Signal line/±1KV (EN61000-4-4 Level3, IEC61000-4-4 Level3)
	Static electricity resistance	Contact discharge / ±4kV (IEC61000-4-2 Level 2, EN61000-4-2 Level 2) Atmospheric discharge / ±8kV (EN61000-4-2 Level 3, IEC61000-4-2 Level 3)
Vibration resistance *3	Sweep resistance	10 - 57Hz / semi-amplitude: 0.075 mm, 57 - 150Hz /9.8m/s² (1G) 40 min. each in x, y, and z directions (JIS C60068-2-6 -compliant, IEC60068-2-6 -compliant)
Shock resistance *3		10G, half-sine shock for 11 ms in x, y, and z directions (JIS C60068-2-27-compliant, IEC60068-2-27-compliant)
Standard		VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive) *4

- When the AC adapter holder (Replacement parts) is not installed. The wireless LAN installed type is not certified for CE Marking.

# **Physical Dimensions**

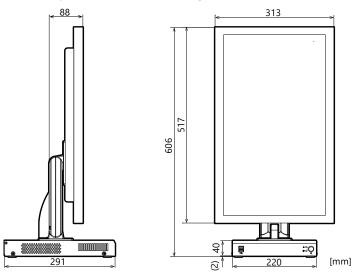
SPT-200A-22TP

Display horizontal installation



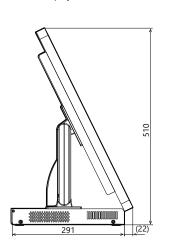
Display vertical installation

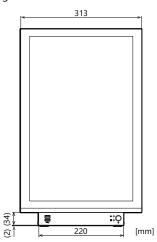
Set the display monitor in the lower VERA fixing hole



 <sup>\*1</sup> 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.

# Set the display monitor in the center VERA fixing hole





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# **Replacement Parts for Maintenance**

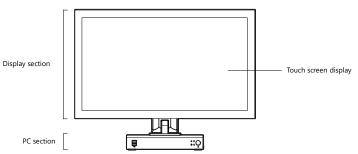
Parts name	Туре	Description
VESA Mount Parts	SPT-200A-VESA	SPT-200A Series VESA Mount Parts(100mm×100mm)
CPU Cooling Fan	SPT-200A-FAN	SPT-200A Series CPU FAN Unit
AC Adapter Holder	SPT-200A-PWA	SPT-200A Series AC Adapter Mount Parts
Hard Disk	SSD-128GS-2T	2.5inch 128GB SATA SSD
	HDD-500GS-2	2.5inch 500GB SATA HDD
Display Monitor	SPT-22TP-DSP	STAND-PC 21.5" PCAP Touch screen display
	SPT-22TR-DSP	STAND-PC 21.5" Optical Touch screen display

 $\label{thm:content} \mbox{ Visit the CONTEC website for the latest replacement parts for maintenance. }$ 

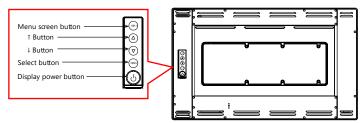
# **Nomenclature of Product Components**

### SPT-200A-22TP

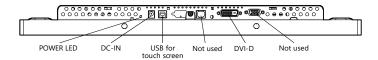
#### **Product front view**



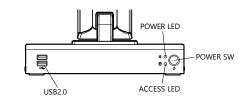
# Display section rear view



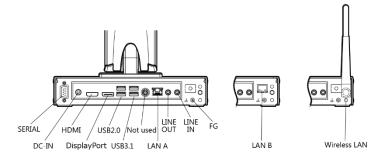
### Display section bottom view



# PC section front view



### PC section rear view



# **Component Function**

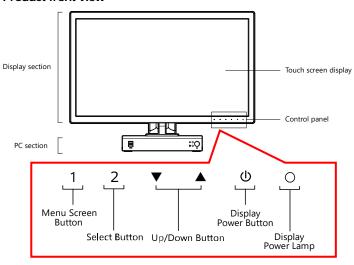
Name	Function
Display section	,
Display POWER BUTTON	Power switch for a display
POWER LED	Power ON display LED
DC-IN	DC power input connector
USB for the touch-screen *1	TYPE-B connector x 1
DVI-D*1	Display port (24-pin Female)
PC section Front	
USB2.0	USB2.0 port TYPE-A connector x 2
POWER LED	PC power display LED
ACCESS LED	Disk access display LED
POWER SW	PC power switch
PC section Rear	
SERIAL	Serial port connector (9-pin D-SUB Male)
DC IN	DC power input connector
HDMI	Display (19-pin HDMI TYPE-A connector)
DisplayPort *1	DisplayPort connector (20-pin Female)
USB2.0	USB2.0 port TYPE-A connector ×2
USB3.1	USB3.1 Gen1 port TYPE-A connector ×2
LANA	Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector
LINE OUT	Line out (3.5φ PHONE JACK)
LINE IN	line input (3.5φ PHONE JACK)
FG	Frame ground
LAN B (Selection) *2	Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector
Wireless LAN (Selection)	Antenna for Wireless LAN IEEE 802.11 ac/a/b/g/n

<sup>\*1</sup> Use this to display two screens.

<sup>\*2</sup> Storage [M.2 SSD 128GB] is unavailable when you select LAN B (wired LAN).

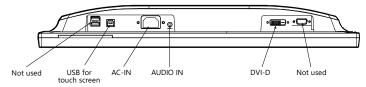
### SPT-200A-22TR

### Product front view

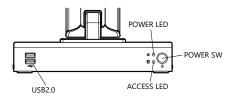


ltem		Description
1	Menu Screen Button	This displays the setting menu or ends the control displayed.
2	Select Button	This displays the control setting screen of the selected menu.
▼/▲	Up/Down Button	This switches the menu or adjusts the control displayed.
Ú	Display Power Button	Display power ON/OFF
0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

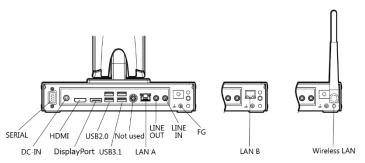
# **Display section Bottom view**



### PC section Front view



# PC section Rear view



# **Component Function**

Name	Function
Display section	
Display POWER BUTTON	Power switch for a display
POWER LED	Power ON display LED
USB for the touch screen *1	TYPE-B connector x 1
AC-IN	AC power input connector
AUDIO IN	LINE inpu (3.5φ PHONE JACK)
DVI-D*1	Display port (24-pin Female)
PC section Front	
USB2.0	USB2.0 port TYPE-A connector x 2
POWER LED	PC power display LED
ACCESS LED	Disk access display LED
POWER SW	PC power switch
PC section Rear	
SERIAL	Serial port connector (9-pin D-SUB Male)
DC IN	DC power input connector
HDMI	Display (19-pin HDMI TYPE-A connector)
DisplayPort *1	DisplayPort connector (20-pin Female)
USB2.0	USB2.0 port TYPE-A connector ×2
USB3.1	USB3.1 Gen1 port TYPE-A connector ×2
LAN A	Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector
LINE OUT	Line out (3.5φ PHONE JACK)
LINE IN	line input (3.5φ PHONE JACK)
FG	Frame ground
LAN B (Selection) *2	Ethernet 1000BASE-T/100BASE-TX/10BASE-T RJ-45 connector
Wireless LAN (Selection)	Antenna for Wireless LAN IEEE 802.11 ac/a/b/g/n

<sup>\*1</sup> Use this to display two screens

<sup>\*2</sup> Storage [M.2 SSD 128GB] is unavailable when you select LAN B (wired LAN).