

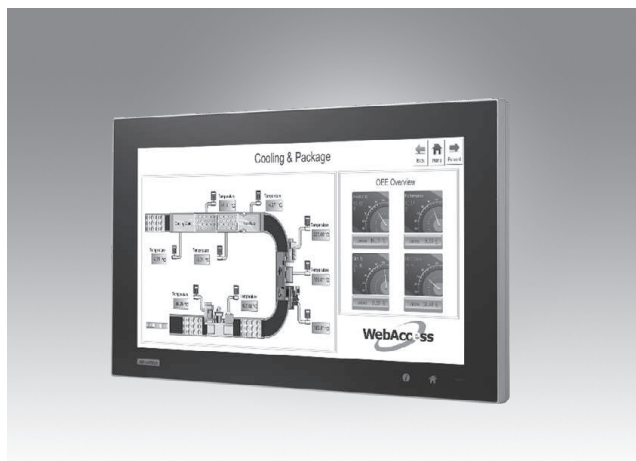
SPC-221



product
design award

2013

21.5" Full HD LED LCD Stationary Multi-Touch Panel Computer



Features

- 21.5" Full HD TFT LED LCD display
- Intel® Skylake Core™ i3-6100U 2.3 GHz processor (Dual-Core)
- 16:9 wide screen with PCT multi-touch
- Built-in function and home key buttons for intuitive UI
- Anti-scratch touch surface: 7H hardness
- All-round IP66 protection with waterproof M12 connector
- Supports Mini-PCIe expansion slot
- Front LED indicator to show operating status
- Fanless cooling system
- Winner of the 2013 iF product design award



Introduction

With a brand-new ID design, the SPC-221 series have high resolution 21.5" displays and PCT multi-touch screens in 16:9 wide format. By embedding an Intel® Skylake Core™ i3-6100U 2.3 GHz processor (Dual-Core), the SPC-221 can support advanced graphical performance in complex applications. It has built-in function and home key buttons for greater usability and also supports a Mini-PCIe slot for communication function expansion. It also has an all-round IP66 waterproof casing design with M12 connectors. With this vertical I/O connector, cable routing is simplified, safer, and more reliable for stationary / VESA arm applications.

Specifications

General

- **Certification** BSMI, CCC, CE, FCC Class A, UL
- **Cooling System** Fanless design
- **Dimensions (W x H x D)** 558.4 x 349.8 x 65 mm (21.98" x 13.77" x 2.56")
Front bezel: Die-cast Aluminium alloy
Back housing: Die-cast Aluminium alloy
- **Enclosure**
- **Mounting** VESA Arm
- **OS Support** Microsoft® Windows 10 Enterprise LTSB
- **Power Consumption** 35 W Typical
- **Power Input** 24 V_{DC}
- **Weight (Net)** 9 kg (19.8 lbs)

System Hardware

- **CPU** Intel 6th Core U-series -
Intel Core i7-6600U, 2.6GHz (optional)
i5-6300U, 2.4GHz (optional)
i3-6100U, 2.3GHz
Celeron-3955U, 2.0GHz (optional)
- **Memory** 8GB SO-DIMM DDR3L SDRAM (Up to 16GB)
- **LAN** 10/100/1000Base-T x 2 (connection: M12 A-coded, 8-pin female)
- **Expansion Slots** Full-sized Mini PCIe slot x 1 (optional)
- **Storage** 2.5" SATA HDD bracket x 1
- **I/O** RS-232 x1 (connection: M12 A-coded, 8-pin male)
USB 2.0 x1 (connection: M12 A-coded, 8-pin female)
24 V_{DC} power input (connection: M12 A-coded, 5-pin male)

LCD Display

- **Display Type** Full HD TFT LED
- **Display Size** 21.5"
- **Max. Resolution** 1920 x 1080
- **Max. Colors** 16.7 M
- **Luminance cd/m²** 300
- **Viewing Angle (H/V°)** 21.5": 178/178
- **Backlight** Life 50,000 hrs

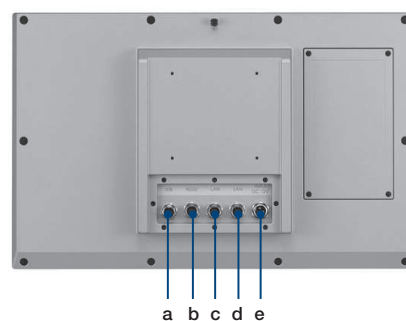
Touchscreen

- **Light Transmission** ≥88%
- **Resolution** 4096*4096 dot
- **Type** Projected capacitive

Environment

- **Humidity** 95% RH @ 40°C, non-condensing
Note: Tested for 48hrs
All-round IP66 protection
- **Ingress Protection**
- **Operating Temperature** 0 ~ 55°C (32 ~ 131°F)
- **Storage Temperature** -20 ~ 60°C (-4 ~ 140°F)
- **Vibration Protection** With HDD: 1 Grms (5 ~ 500 Hz)
(Operating, random vibration)

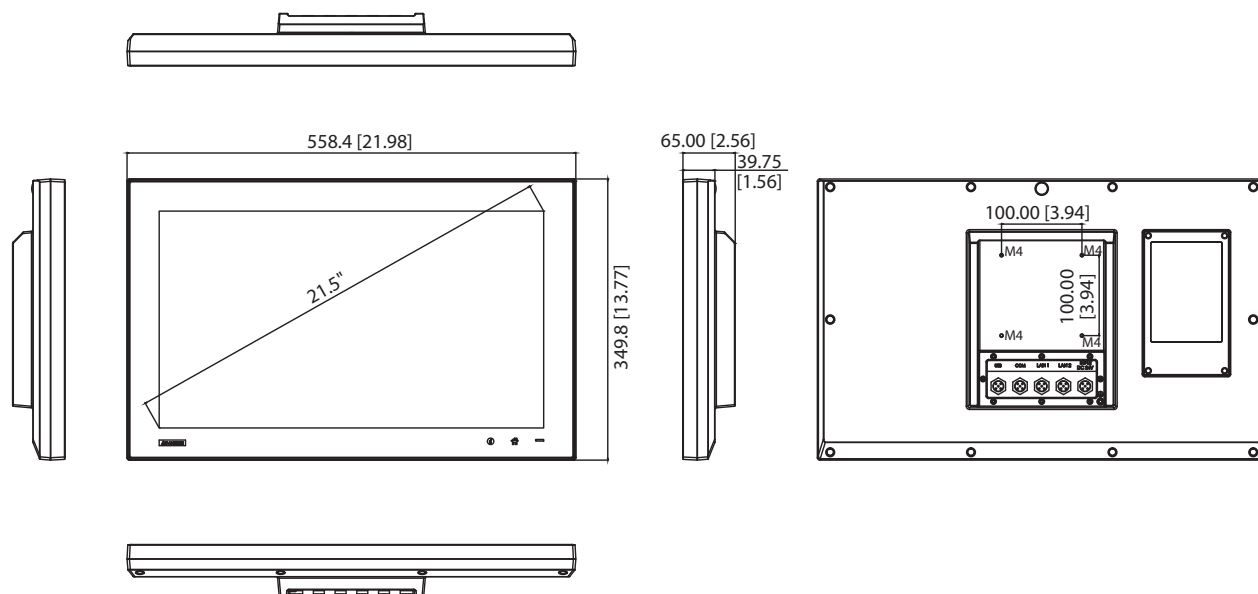
Rear View



- a. USB 2.0 with M12 connector
- b. COM (RS-232) with M12 connector
- c. LAN 1 with M12 connector
- d. LAN 2 with M12 connector
- e. 24 V_{DC} input with M12 connector

Dimensions

Unit: mm [inch]



Ordering Information

- SPC-221-633AE 21.5" full-HD Stationary Panel PC / I3-6100U,8GB

Optional Accessories

- 1702002600 Power cable US plug 1.8 M
- 1702002605 Power cable EU plug 1.8 M
- 1702031801 Power cable UK plug 1.8 M
- 1700000596 Power cable China/Australia plug 1.8 M
- EWM-W193H01E 802.11 ac/a/b/g/n + BT 5.0 Half Mini-PCIe Module (also need 9656EWMG00E)
- 9656EWMG00E Half-size miniPCIe to Full-size miniPCIe bracket set
- 1750007668-01 Waterproof wireless antenna R/P SMA.M2dB L=86.7
- 1750003418 Wireless antenna AN2400-5901RS R/P SMA.M9dB
- SPC-1840WP-MCKE M12 cable accessory kit for SPC series
- SPC-1840WP-MOKE M12 connector accessory kit for SPC series
- 20703WX9VS0010 Windows 10 LTSC 2019 V6.04 B024 Value Image (Standard i3 Model)
- 20703WX9HS0004 Windows 10 LTSC 2019 V6.04 B024 High Image (i7 Model)

Packing List

Item	Part No.	Depiction	Qty
SC Manual	2003022100	User Manual(SC) for SPC-221 1st ed	1
Screw	1930001024	Screw M4*8L R/S D=8.9 H=2.5 + ST Ni NK	4
Screw	1930005204	Screw M4x10L R/S DH=6.8x2.50 + ST ZBK PL	4
Screw	1930000686	Screw M3x5L S/S D=5 H=1.3 (2+) ST Ni NK	4
Screw	1930001361	Screw M3x4L S/S D=5 H=1.2 (2+) ST Ni NK	4
Warranty Card	2190000902	CARDBOARD-WARRANTY REV. A2	1

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.

Application Software

WebAccess/SCADA

Advantech WebAccess is a 100% web based SCADA (Supervisory Control And Data Acquisition) software and it acts as an IIoT Platform providing open interfaces for partners to develop IIoT applications for different vertical markets. In addition to traditional SCADA functions, WebAccess has an intelligent Dashboard, to provide users with cross-platform, cross-browser data analysis and user interface using HTML5 technology. As well as the built-in widgets, WebAccess also provides Widget Builder to allow customers to build their own.

WebAccess/HMI

WebAccess/HMI is Human Machine Interface (HMI) software based on Microsoft's Windows operating system. It utilizes a PC's ample resources, ie speed, storage, multimedia, peripheral devices, and large screen to produce a complex human-machine interface. WebAccess/HM with its communication and monitoring ability supports more than 350 PLC communication protocols and a wide choice of screen design objects, to satisfy multiple integrations of factory automation and all-round human-machine interface operation and monitoring requirements.