# SPC-815/SPC-821

# 15.6" HD TFT LED LCD/21.5" Full HD TFT LED LCD Standalone Multi-Touch Panel Computer



#### **Features**

- 15.6"/21.5" (Full) HD TFT LED LCD display
- Intel® Core™ i3-6100U dual-core, 2.3 GHz processor
- 16:9 widescreen with P-CAP multi-touch control
- Built-in function keys for intuitive operation
- Scratch-resistant touch panel with 7H surface hardness
- Silicone-free enclosure with all-round IP65-rated protection
- Supports CP 40 (Rittal) and CS-480 B.Flex (Bernstein) mount standards
- Front-facing USB ensures easy maintenance
- Supports the RAFI FS22+ Series pushbuttons



#### Introduction

SPC-800 is an arm-mounted HMI that can be integrated with an extension unit that supports RAFI FS22+ Series pushbuttons. Designed to support diverse industrial mounting standards, such as CP 40 (Rittal) and CS-480 (Bernstein), SPC-800 provides a versatile HMI that can be installed in a variety of intelligent factories and machines. The SPC-800 is powered by an Intel® Core™ i3-6100U 2.3 GHz processor that delivers advanced graphical performance to facilitate the realization of field IoT applications. The HMI is also equipped with a silicone-free enclosure that features all-around IP65-rated protection from water and dust. Moreover, with the inclusion of an I/O cover, all cables can be hidden for a tidy appearance and simplified wiring installation..

# **Specifications**

#### General

Certification
 CCC. CE. FCC Class A. UL

Cooling System Fanless design
 Dimensions (W x H x D) SPC-815:

402.19 x 333.19 x 67 mm/15.83 x 13.11 x 2.63 in

(without flange for arm mount)

402.19 x 333.19 x 160 mm/15.83 x 13.11 x 6.29 in

(with flange for arm mount)

SPC-821:

546.69 x 420.34 x 67 mm/21.52 x 16.54 x 2.63 in

(without flange for arm mount)

546.69 x 420.34 x 160 mm/21.52 x 16.54 x 6.29 in

(with flange for arm mount)

Enclosure
 Front bezel: Die-cast aluminum alloy

Poor begeing: Die cast aluminum alloy

Rear housing: Die-cast aluminum alloy Front push button bracket : metal sheet

• **Mount Options** Pole Mount : Supports Rittal CP40 and Bernstein

CS-480 B.Flex arm system dimension

VESA Mount (Optional)

■ **OS Support** Microsoft® Windows 10 Enterprise LTSB

Power Consumption 35 W Typical, Max. 60 W Typical

Power Input
 24 V<sub>DC</sub>

• Weight (Net) 21.5": 10.6 kg/23.3 lb 15.6": 8.2kg/18.1 lb

**System** 

- CPU Intel® Skylake U-series Processor Intel® Core™ i3-6100U, 2.3 GHz

Memory
 8 GB SODIMM DDR3L SDRAM, up to 16 GB RAM

LAN 2 x 10/100/1000 BASE-T
 Expansion Slots 1 x Full-sized mini PCle (optional)
 Storage 1 x 2.5" SATA HDD bracket

**1/0** 1 x USB 2.0 (front) 2 x USB 3.0

• **COM Port** 2 x RS-232/422/485 (optional)

**LCD Display** 

Display Type
 21.5" Full HD TFT LED
 15.6" HD TFT LED (FHD optional)

■ **Display Size** 21.5"/15.6"

■ Max. Resolution 21.5": 1920 x 1080 15.6": 1366 x 768

Max. Colors 16.7 M

**Luminance** 250 (21.5")/400 cd/m<sup>2</sup> (15.6")

**Viewing Angle (H/V)** 21.5": 178°/178° 15.6": 170°/130°

Backlight

50,000 hr lifetime

#### Touchscreen

■ Light Transmission ≥88%

Resolution 4096 x 4096 dotsType Projected capacitive

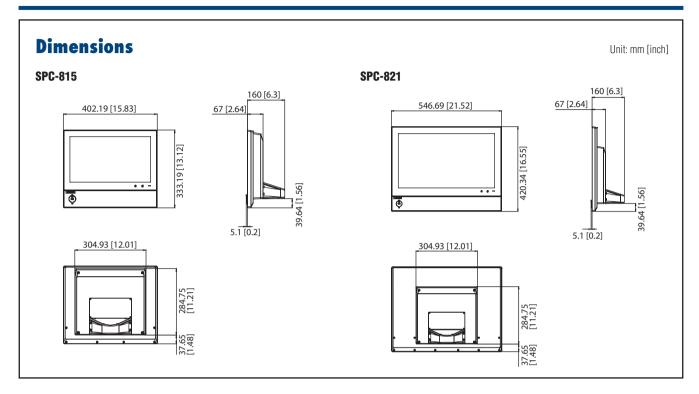
**Environment** 

Humidity
 95% RH @ 40 °C/104 °F, non-condensing

(tested for 48 hrs)

(Operating, random vibration)

Ingress Protection All-round IP65 rating
 Operating Temperature 0 ~ 55 °C (32 ~ 131 °F)
 Storage Temperature -20 ~ 60 °C (-4 ~ 140 °F)
 Vibration Protection With SSD: 1 Grms (5 ~ 500 Hz)



### **Modular Ordering Information**

Notice: Base unit and Push Button Panel should order together

#### **Base Unit**

• **SPC-821-633A** IP65-rated standalone panel PC with 21.5" FHD,

P-CAP touch, front USB, Intel i3-6100U CPU,8 GB

RAM

• SPC-815-633A IP65-rated standalone panel PC with 15.6" HD, P-CAP

touch, front USB, Intel i3-6100U CPU,8 GB RAM

**Push Button Panel** 

• **SPC-821-PBEK** 21.5" push button panel, 1x emergency button, 1x

green button, 1x red button, 1 x blue button with PCBA,

1 x big terminal board, 2 x 20-pin connector

SPC-815-PBEK
 15.6" push button panel, 1x emergency button, 1x green button, 1x red button, 1 x blue button with PCBA,

1 x big terminal board, 2 x 20-pin connector

• **SPC-821-W0EK** 21.5" push button panel, w/o push button,w/o PCBA,

1 x big terminal board, 2 x 20-pin connector

• SPC-815-W0EK 15.6" push button panel, w/o push button, w/o PCBA,

1 x big terminal board, 2 x 20-pin connector

### **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

• 9656EWMG00E Half-size mini PCle to full-size mini PCle bracket set

96PSA-A60W24T2-3 Adapter 100 ~ 240V 120W 24V 5A

**20703WX9HS0014** Img W10 LTSC V6.05.017 SPC-815/821-6xxAE High

(For Core i7 version)

**20703WX9VS0017** Img W10 LTSC V6.05.017 SPC-815/821-6xxAE Value

(For core i3 / Celeron use)

98R1800M020 Accessory Kit for SPC-800 VESA Mounting

#### For Supporting WOEK expand button

• **98R30800P01** Emergency push button PCBA with cable

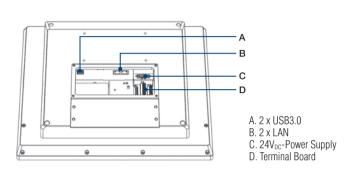
98R30800P04
 98R30800P06
 98R30800P05
 1 push button PCBA with cable
 98R30800P05
 1 push button PCBA with cable

# **Packing List**

Item	Part No.	Depiction	Qty
HDD Screw	1930001361	Screw M3x4L S/S D=5 H=1.2 (2+) ST Ni NK	4
Plug-In Block	1652007930-01	Plug-In Block 1x3P/5.08mm/PA66/F/VA/Sn/GR/H15	1
Warranty	2190000902	CARDBOARD-WARRANTY REV. A2	1
Grounding cable	1703011001-11	A Cable G-TEM 4.3 100CM C=GR/Y	1
Bracket	1960093824N001	BKT COVER IO 432C for SPC-821	1
Flange	9653800M010	Accessory Kit for SPC-800 (M) PIPE Mounting	1

# **Rear View**





# **Push Button Pin Definition**





CN8						
10	S3 NC	20	GND			
9	S3 N0	19	S4 LED (+24V)			
8	S3 COM	18	S3 LED (+24V)			
7	S2 NC	17	S2 LED (+24V)			
6	S2 N0	16	S5 NC			
5	S2 COM	15	S5 NO			
4	S1 NC2	14	S5 COM			
3	S1 COM2	13	S4 NC			
2	S1 NC1	12	S4 N0			
1	S1 COM1	11	S4 COM			

CN7						
10	S5 LED (+24V)	20	GND			
9	S8 NC	19	GND			
8	S8 NO	18	S7 LED (+24V)			
7	S8 COM	17	S6 LED (+24V)			
6	S7 NC	16	S10 NC			
5	S7 N0	15	S10 N0			
4	S7 COM	14	S10 COM			
3	S6 NC	13	S9 NC			
2	S6 NO	12	S9 NO			
1	S6 COM	11	S9 COM			