



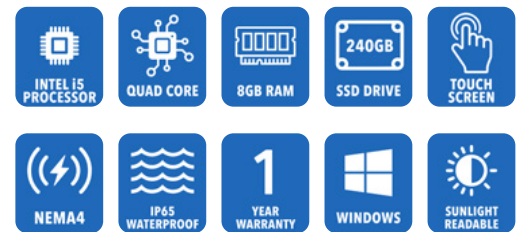
**AbraxSys**  
RUGGED LCD SOLUTIONS

# 19" Sunlight Readable Industrial Grade IP65 (NEMA 4) Touch Screen LCD Flat Panel Computer

**Model SPC2-PM-190**

This series of rugged sunlight readable panel PCs is the ultimate solution for outdoor embedded computing and are ideally suited for high ambient light environments where dust, dirt, moisture, splashing water, hose directed spray, and various other caustic contaminants like oil, chemicals, etc. are commonplace. This advanced series features Standard: Intel 11th Generation Core I5-1145GRE (8M Cache, up to 4.10 GHz), 240GB Solid-State Drive (higher capacity available), 8GB memory (expandable to 32GB), a vast array of I/O and Ethernet ports, Intel's Skylake graphics chipset, solid-state long-life LED backlighting, solid-state storage devices, and exceptional temperature ranges: Operating Temperature: -20°C to 60°C (-4°F to 140°F), Storage Temperature: -40°C ~ 75°C (-40°F ~ 167°F).

As well, a multitude of add-on features are available to meet our customer's specific requirements.



# Technical Specifications

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## Computer Specs

### CPU

- Intel® Core™ i5-1145G7E (up to 4.1GHz, quad-core, 8M Cache, TDP: 28/15/12W)
- Tiger Lake 11th generation Intel Core processors

### Chipset

I/O Chipset EC iTE IT8528E

### Graphics Chipset

Intel® Iris® Xe Graphics, 12th Generation

### Intel's Boost Technology

Max Turbo Frequency of 4.10 GHz

### Storage

240GB Solid State  
[Optional larger capacity drives also available]

### Memory

8GB expandable to 16GB or 32GB

### I/O

- USB:
  - 4xUSB 3.0
  - 4xUSB 2.0
- Com Port:
  - 2 x RS-232/422/485
  - 4 x RS-232 Out (other ports available, please let us know what is needed)

### Ethernet

- 1 x Intel® I225IT 2.5 Gigabit Ethernet (LAN2), 1 x Intel® I219LM Gigabit Ethernet PHY (LAN1),
- 3 x USB3.1 Gen2, 1 x USB 3.1 Gen1 at I/O

### Operating System

Windows 10 IoT Enterprise Operating System  
[Optional Win 10 Pro or Win 11 Pro also available]

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## General

### Model

SPC2-PM-190

### Display Size

19.0"

### Display Type

Long-Life Industrial Grade Active Matrix TFT LCD

### Backlight Technology

Solid State, Long-Life LED, with Light Source Redundancy

### Optical Films Enhancements

Optical Film Enhancements Boosts efficiency of the backlight's light utilization and minimizes the surface reflection of ambient light. The result is a transmissive enhancement that features higher contrast and a wider range of colors, even in bright outdoor light, than traditional reflective LCDs. [CLICK HERE for more information.](#)

### Brightness

1600 nits (cd/m2)

### Dimming Capabilities

Optional Full-Range Manual Turn-Pot, Automatic Dimming Sensor, Remote Dimming, Standard

### Contrast Ratio

1000:1

### Aspect Ratio

5:4

### Resolution

1280 x 1024 (SXGA) Native

### Colors Supported

16 million

### Viewing Angles

-88° / 88° Horizontal  
-88° / 88° Vertical

### Optical Bonding

[Optical Bonding](#)

### Power Types

90 VAC to 264 VAC; 12V DC; 24V DC; 9 to 36V DC; or 20 to 53V DC

## Physical Attributes

### Front Bezel

High Grade 6061T Aluminum, Electrochemical Anodized for added Corrosion Resistance, Black Textured Finish per Military Standards FED-STD-595

### Rear Enclosure

High Grade 6061T Aluminum, Electrochemical Anodized for added Corrosion Resistance, Black Textured Finish per Military Standards FED-STD-595

### Panel Mounting

10-32 Stainless Mounting Studs, 1/2" Exposed Thread

### Overall Dimensions

19.00 x 15.720 x 3 in  
(482.6 x 399 x 66mm)  
(see drawings)

### Cutout

14.582 x 17.862  
(370.38 x 453.69 mm)  
(see drawings)

### Weight

~20 lbs.

### Sealability

NEMA 4 (IP65)

### Sunlight Readability

The latest optical technology for high ambient light conditions

### Warranty Period

1 Year

## Environmental

### Sunlight Readability

The latest optical technology for high ambient light conditions

### Operating Temperature Range

-20°C to 60°C (-4°F to 140°F)

### Storage Temperature

-40°C ~ 75°C (-40°F ~ 167°F)

### Humidity

5% to 95% RH (non-condensing)

### Shock

Operating: 30g's, 11ms, 1/2 Sine

### Vibration

1g RMS 20-500Hz

### Fasteners

Vibration-proof, self-locking, fastener system

### EMI

FCC Class B pursuant to Part 15 of the FCC Rules

### Agency Compliance

CE

### Altitude

Operating 0 to 10,000 ft.  
Storage 0 to 40,000 ft.

### RoHS Compliant

Yes

### Rating

NEMA 4 / IP65

## Additional Add-On Options

### Touch Screen Technology

#### Resistive

#### Multi-Touch Up to 10-Point PCAP

#### Hardened Armored Touch Technology

#### Extended Operational Temperature Ranges

### Power Type Choices

90 VAC to 264 VAC; 12V DC; 24V DC; 9 to 36V DC; or 20 to 53V DC

#### Conformal Coating of all Internal Circuit Boards

#### Private Labeling Services

#### Customization Services

### Dimming Capabilities

Standard, or Optional Full-Range Manual Turn-Pot, Automatic Dimming Sensor, Remote Dimming

### Optional O/S

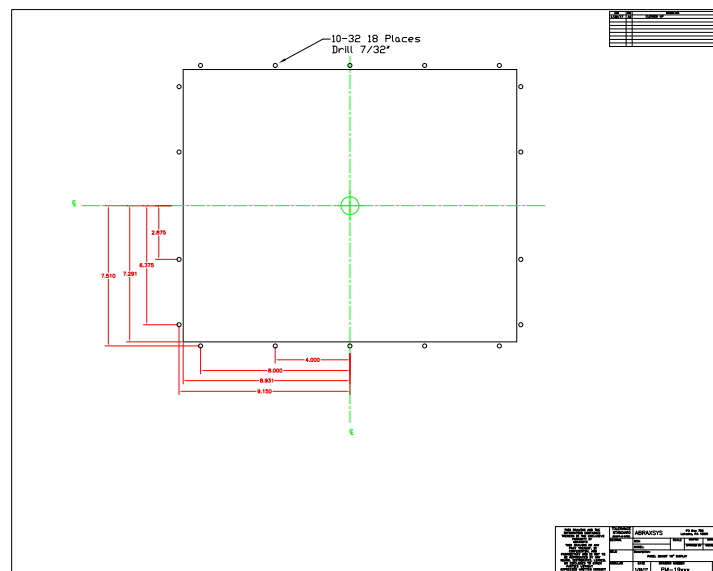
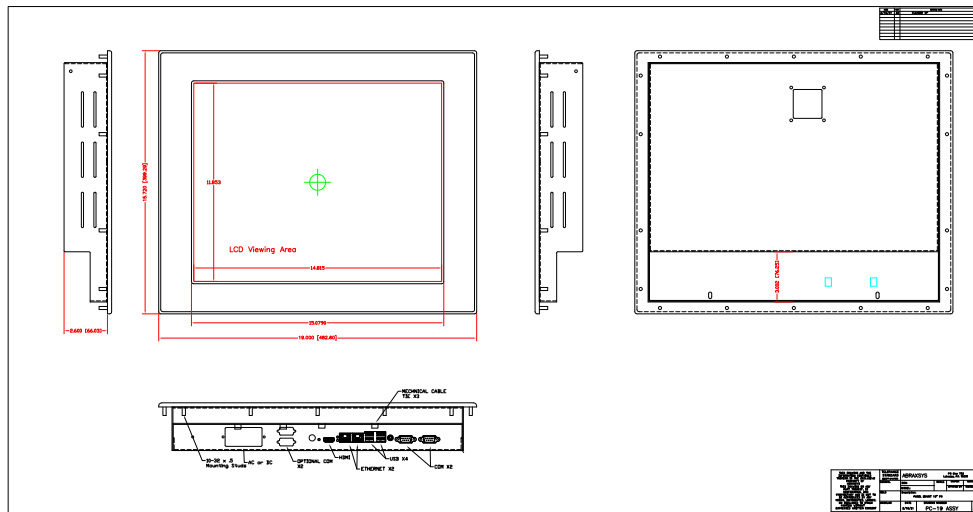
Windows 10 PRO or 11 PRO

### Larger Storage Devices

NEMA 4X IP66 Stainless Steel Front Bezel

Wi-Fi (wireless networking technology)

# Mechanical Drawings



*These technical and mechanical resources are subject to change without notice.*



**AbraxSys**  
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