



AbraxSys
RUGGED LCD SOLUTIONS

18.5" Stainless Steel Panel PC 1080P High Bright Wide Video Format NEMA 4X (IP66) Touch Screen

Model SPC2-PS-185

This series of rugged sunlight readable 1500 nits brightness 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: 6th Generation Intel Core SoC i5 BGA Processor (i5-1145G7E/GRE, quad-core, 4.1GHz), 240GB Solid-State Drive (higher capacity available), 8GB memory (expandable to 32GB/64GB), 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

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]

General

Model

SPC2-PS-185

Display Size

18.5"

Display Type

Long-Life Industrial Grade LCD

Backlight Technology

Long-Life Advanced LED
Backlighting, over 100,000 Hours
Half-Life

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

1500 nits (cd/m2)

Dimming Capabilities

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

Contrast Ratio

1000:1

Aspect Ratio

16:9

Resolution

1920 x 1080 (1080p)

Colors Supported

16.7M (8-bit/color)

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, 20 to 53V DC

Physical Attributes

Front Bezel

Gasket-Sealed Stainless Steel

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

See Drawings

Cutout

11.959 x 18.628 in
(303.76 x 473.16mm)

Weight

See Drawings

Sealability

NEMA 4X (IP66)

Sunlight Readability

The latest optical technology for
high ambient light conditions

Warranty Period

1 Year

Environmental

Sunlight Readability

Sunlight Readable Model Available

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, ½ Sine

Vibration

Operating: 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

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

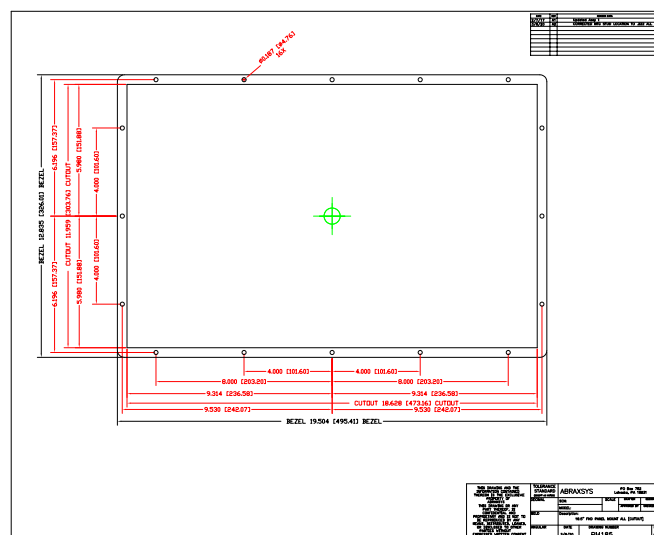
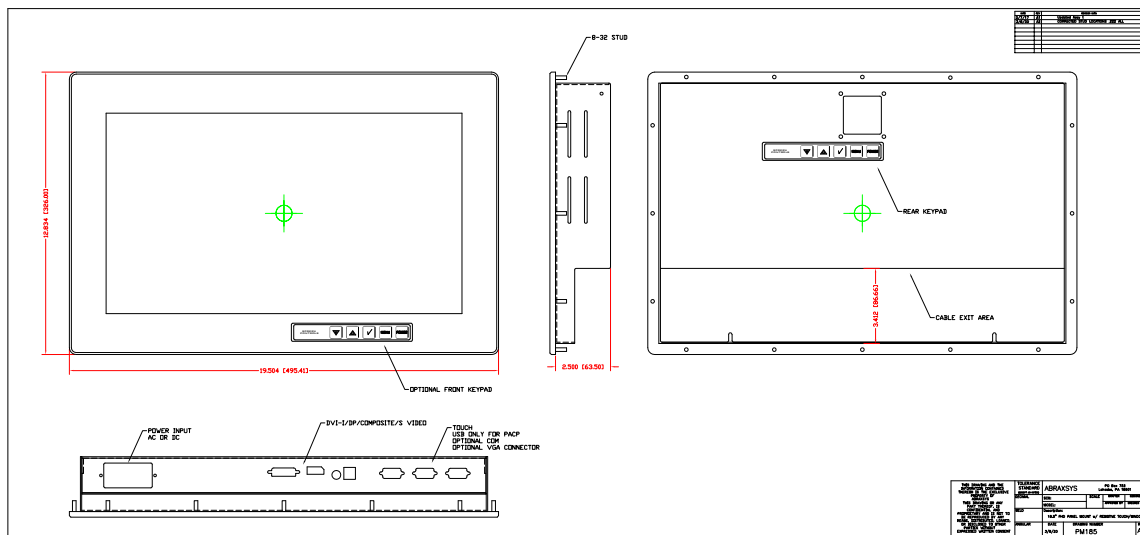
Windows 10 PRO or 11 PRO

Larger Storage Devices

NEMA 4 IP65 Aluminum
Front Bezel

Wi-Fi (wireless networking
technology)

Mechanical Drawings



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



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