

## Data sheet

6AV7251-3CA04-0FA0

SIMATIC IPC477E PRO fully enclosed IP65; 15" Multitouch (1366 X 768); suitable for pedestal/ extension components (flange at bottom); 4USB (back); w/o USB (front); Ethernet (10/100/1000);

### General information

Product type designation IPC477E PRO

### Display

Design of display TFT widescreen display, LED backlighting

Screen diagonal 15 in

Display width 344.2 mm

Display height 193.5 mm

### Resolution (pixels)

- Horizontal image resolution 1 366 Pixel
- Vertical image resolution 768 Pixel

### Control elements

#### Touch operation

- Design as touch screen Yes; Projective-capacitive

### Installation type/mounting

Mounting For mounting on stand or supporting bracket

Design Panel PC on pedestal or supporting arm

Support arm mounting No

Stand mounting Yes; Prepared for pedestal and extension components

Mounting in portrait format possible No

maximum permissible installation angle +/-  $\pm 45^\circ$

### Supply voltage

Type of supply voltage 24 V DC

#### Line frequency

- Rated value 50 Hz Yes
- Rated value 60 Hz Yes

### Processor

Processor type Celeron G3902 (2C/2T, 1.6 GHz, 2 MB Cache); Core i3-6102E (2C/4T, 1.9 GHz, 3 MB Cache); Core i5-6442EQ (4C/4T, 1.9 (2.7) GHz, 6 MB Cache, iAMT); Xeon E3-1505L v5 (4C/8T, 2.0 (2.8) GHz, 8 MB Cache, iAMT)

### Graphic

Graphics controller Intel HD graphics controller

### Drives

Optical drives	possible as external drive via USB
SSD	Yes; 1x 128 GB, 1x 240 GB SSD, 1x 480 GB SSD
<b>Memory</b>	
Type of memory	DDR4 SO-DIMM
Main memory	4 GB to 16 GB, ECC optional
Capacity of main memory, max.	16 Gbyte
<b>Data areas and their retentivity</b>	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time
<b>Hardware configuration</b>	
<b>Slots</b>	
<ul style="list-style-type: none"> <li>Number of PCI slots</li> </ul>	0; Different to the built-in unit
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<ul style="list-style-type: none"> <li>Number of compact flash slots</li> </ul>	1; CFAST
<b>Interfaces</b>	
Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
USB port	4x USB 3.0 onboard (rear)
Connection for keyboard/mouse	USB / USB
serial interface	Without / 2x COM (RS 232 / 422 / 485), selectable in the BIOS
<b>Video interfaces</b>	
<ul style="list-style-type: none"> <li>Graphics interface</li> </ul>	2x DisplayPort
<b>Industrial Ethernet</b>	
<ul style="list-style-type: none"> <li>Industrial Ethernet interface <ul style="list-style-type: none"> <li>— 100 Mbps</li> <li>— 1000 Mbps</li> </ul> </li> </ul>	3x Ethernet (RJ45) Yes Yes
<b>Interrupts/diagnostics/status information</b>	
Bus diagnostics	Yes
<b>Integrated Functions</b>	
<b>Monitoring functions</b>	
<ul style="list-style-type: none"> <li>Temperature monitoring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Watchdog</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Fan</li> </ul>	No
<ul style="list-style-type: none"> <li>Monitoring function via network</li> </ul>	Optional
<b>EMC</b>	
<b>Interference immunity against discharge of static electricity</b>	
<ul style="list-style-type: none"> <li>Interference immunity against discharge of static electricity</li> </ul>	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2
<b>Interference immunity against high-frequency electromagnetic fields</b>	
<ul style="list-style-type: none"> <li>Interference immunity against high frequency radiation</li> </ul>	10 V/m, 80 ... 2 000 MHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2 ... 2.7 GHz; 10 V, 10 kHz ... 80 MHz acc. to IEC 61000-4-6

Interference immunity to cable-borne interference	
• Interference immunity on supply cables	±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric
• Interference immunity on signal cables >30m	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
• Interference immunity on signal cables < 30m	±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m
Interference immunity against voltage surge	
• asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
• symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
• Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	
• Interference emission via line/AC current cables	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
Degree and class of protection	
IP65 (all-round)	Yes; IP65 fully enclosed
IP (at the front)	IP65
IP (rear)	IP65
Standards, approvals, certificates	
CE mark	Yes; CE marking / EC Declaration of Conformity
UL approval	Yes
• UL 508	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	No
EMC	CE, EN 61000-6-4; CISPR 22 Class A; FCC Class A
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Det Norske Veritas (DNV)	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes
Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	5 to +45°C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	

<ul style="list-style-type: none"> <li>Relative humidity</li> </ul>	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation)
<b>Vibrations</b>	
<ul style="list-style-type: none"> <li>Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul>	Tested to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm, 58 Hz to 200 Hz: 9.8 m/s <sup>2</sup> (1 g)
<b>Shock testing</b>	
<ul style="list-style-type: none"> <li>Shock load during operation</li> </ul>	Tested according to IEC 60068-2-27, IEC 60068-2-29: half-sine: 50 m/s <sup>2</sup> (5 g), 30 ms, 100 shocks per axis
<b>Operating systems</b>	
Operating system	Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10
pre-installed operating system	Yes
without operating system	Yes; Optional
pre-installed operating system	
<ul style="list-style-type: none"> <li>Windows 7</li> <li>Windows 10 Enterprise</li> </ul>	Yes; Ultimate 64 bit Yes; Windows 10 Enterprise LTSC 2016, 64-bit, MUI
<b>Dimensions</b>	
Width of the housing front	396 mm
Height of housing front	255 mm; Without basic adapter
<b>Weights</b>	
Panel PC in central design, approx.	6.8 kg
<b>Other</b>	
Warranty period	36 mo; Warranty period
<b>last modified:</b>	10/16/2018