## **Data sheet**

## 6AV7251-7CC04-0DA0

SIMATIC IPC477E PRO fully protected IP65; 15" multi-touch (1366 x 768); for supporting foot (expandable, flange at bottom), 4 USB (back); without USB (front); Ethernet (10/100/1000 Xeon E3-1505L; 3x Gbit Ethernet (IE/PN); 16 GB; without RS 232/RS485; without PCIe; Windows7 Ultimate SP1, 64-bit, MUI (de, en, es, fr, it); Without replaceable mass storage; 256 GB Eco SSD; Without SIMATIC software 24 V DC industrial power supply

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)	
<ul> <li>Horizontal image resolution</li> </ul>	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 +/-	±45 °
Supply voltage	
Type of supply voltage	24 V DC
Mains buffering	
Mains/voltage failure stored energy time	20 ms
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)
Chipset	Intel C236 / Intel H110
Graphic	
Graphics controller	Intel HD graphics controller
Drives	
SSD	Yes; ≥ 128 GB optional
Memory	
Type of memory	DDR4-2400 SO-DIMM
Main memory	4 / 8 / 16 GB, ECC optional
Capacity of main memory, max.	16 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time
Hardware configuration	
Slots	
Number of PCI slots	0; Different to the built-in unit
<ul> <li>Number of PCI slots</li> </ul>	0; Different to the built-in unit
<ul> <li>Number of compact flash slots</li> </ul>	1; CFast
Interfaces	

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
Video interfaces	
Graphics interface	2x DisplayPort
Industrial Ethernet	
Industrial Ethernet interface	3x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	100
	V
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	
<ul> <li>Temperature monitoring</li> </ul>	Yes
<ul> <li>Watchdog</li> </ul>	Yes
● Fan	No
<ul> <li>Monitoring function via network</li> </ul>	Optional
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static	±6 kV contact discharge acc. to IEC 61000-4-2; ±8 kV air discharge acc.
electricity	to IEC 61000-4-2
Interference immunity against high-frequency electromagnet	tic fields
<ul> <li>Interference immunity against high frequency</li> </ul>	10 V/m, 80 2 000 MHz, 80 % AM acc. to IEC 61000-4-3; 3 V/m, 2
radiation	2.7 GHz; 10 V, 10 kHz 80 MHz acc. to IEC 61000-4-6
Interference immunity to cable-borne interference	
<ul> <li>Interference immunity on supply cables</li> </ul>	±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
<ul> <li>Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	±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	
<ul> <li>asymmetric interference</li> </ul>	±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	
<ul> <li>Interference emission via line/AC current cables</li> </ul>	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
CSA approval	Yes
UL approval	Yes
• UL 508	Yes
CULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
EMC	CE, EN 61000-6-4; CISPR 22 Class A; FCC Class A
Use in hazardous areas	
ATEX Zone 2	Yes; Optional
• IECEx Zone 2	Yes; Optional
cULus Class I Zone 2, Division 2	Yes; Optional
Marine approval	
Germanischer Lloyd (GL)	Yes
American Bureau of Shipping (ABS)	Yes
Det Norske Veritas (DNV)	Yes

<ul> <li>Korean Register of Shipping (KRS)</li> </ul>	Yes
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes
Ambient conditions	
Ambient temperature during operation	
<ul> <li>Ambient temperature during operation</li> </ul>	0 °C to 45 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
● max.	60 °C
Relative humidity	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5 % to 85 % at 30 $^{\circ}$ C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 $^{\circ}$ C (no condensation)
Vibrations	
<ul> <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: $9.8~\text{m/s}^2$ (1 g)
Shock testing	
Shock load during operation	Tested according to IEC 60068-2-27, IEC 60068-2-29: half-sine: 50 m/s² (5 g), 30 ms, 100 shocks per axis
Operating systems	
pre-installed operating system	Windows 7 Ultimate (Multi-Language) 64-bit, Windows Embedded Standard 7 E/P 32-bit / 64-bit, Windows 10
without operating system	Yes; Optional
pre-installed operating system	
<ul><li>Windows 7</li></ul>	Yes; Ultimate 64 bit
<ul> <li>Windows 10 Enterprise</li> </ul>	Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI
Dimensions	
Width of the housing front	396 mm
Height of housing front	255 mm; Without basic adapter
Weights	
Weight, approx.	6.8 kg
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