## **SIEMENS**

## Data sheet 6AV7241-3EA04-0JA0

SIMATIC IPC 477E 22" Touch (1920 x 1080); with front USB; 4 USB (back), Ethernet (10/100/1000); Core i3-6102E; 3x Gbit Ethernet (IE/PN); 4 GB without RS 232/RS485; without PCle; Windows7 Ultimate SP1, 64-bit, MUI (de, en, es, fr, it); Without replaceable mass storage; 320 GB HDD SATA; Without SIMATIC software; 24 V DC industrial power supply

General information	
Product type designation	IPC477E
Display	
Design of display	22" TFT touch
Screen diagonal	21.5 in
Resolution (pixels)	
Horizontal image resolution	1 920 pixel
Vertical image resolution	1 080 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	30 000 h
Control elements	
Input device	
Mouse, at front	No
Keyboard fonts	
Function keys	No
alphanumeric keyboard	No
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	Yes; analog, resistive
Installation type/mounting	
Mounting	For horizontal and vertical mounting
Design	Panel PC, built-in unit
central design	Yes
distributed design	No
Mounting in portrait format possible	Yes
Supply voltage	
Type of supply voltage	100/240 V AC (autorange) 50/60 Hz; optional 24 V DC
Line frequency	
Rated value 50 Hz	Yes
Rated value 60 Hz	Yes
Mains buffering	
<ul> <li>Mains/voltage failure stored energy time</li> </ul>	20 ms
Power loss	
In full configuration	24 V DC: max. 74 W, PCIe APCB additionally 5 W
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	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; 128 / 240 / 480 GB
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; optional
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lardware configuration	
Slots	Au DOIs (slat with soul rate in -) Au slat for OFACT
• free slots	1x PCIe (slot with card retainer), 1x slot for CFAST card
Number of PCI slots	1; Optional
Number of compact flash slots	1; CFast
iterfaces  Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
USB port	4x USB 3.0
Connection for keyboard/mouse	USB / USB
serial interface	Without / 2x COM (RS 232 / 422 / 485), selectable in the BIOS
Video interfaces	William P. Com (No 2027 1227 100), colocidado in tilo 2100
Graphics interface	2x DisplayPort
Industrial Ethernet	
Industrial Ethernet interface	3x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
nterrupts/diagnostics/status information	
Bus diagnostics	Yes
ntegrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
• Fan	No
Monitoring function via network	Optional
:MC	
Interference immunity against discharge of static electricity	
<ul> <li>Interference immunity against discharge of static electricity</li> </ul>	$\pm 6$ kV contact discharge acc. to IEC 61000-4-2; $\pm 8$ kV air discharge acc. to IEC 61000-4-2
Interference immunity against high-frequency electromagnetic field	ds
Interference immunity against high frequency radiation	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	
<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
a Interference immunity on signal cables > 20m	
Interference immunity on signal cables >30m     Interference immunity on signal cables < 30m	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4
<ul> <li>Interference immunity on signal cables &lt; 30m</li> </ul>	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	
IP (at the front)	IP65
IP (rear)	IP20
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
FCC	Yes
EMC	CE, EN 61000-6-4; CISPR 22:2004 Class A; FCC Class A
Use in hazardous areas	
ATEX Zone 2	Yes; Optional, only with Multitouch
	Yes; Optional, only with Multitouch

• cULus Class I Zone 2, Division 2	Yes; Optional, only with Multitouch
Marine approval	
Germanischer Lloyd (GL)	Yes
American Bureau of Shipping (ABS)	Yes
Bureau Veritas (BV)	Yes
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	Yes
<ul> <li>Korean Register of Shipping (KRS)</li> </ul>	Yes
<ul> <li>Lloyds Register of Shipping (LRS)</li> </ul>	Yes
Nippon Kaiji Kyokai (Class NK)	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	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: $5\%$ to $80\%$ at $25\ ^{\circ}\text{C}$ (no condensation)
Vibrations	
<ul> <li>Vibration resistance during operation acc. to IEC 60068- 2-6</li> </ul>	IEC 60068-2-6; 5 Hz to 9 Hz: 3.5 mm; 9 Hz to 500 Hz: 9.8 m/s² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s² (hard disk)
Shock testing	
Shock load during operation	IEC 60068-2-27; 150 m/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)
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
Windows 10 Enterprise	Yes; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI
Software	
SIMATIC Software	Optionally with pre-installed SIMATIC WinCC RT Advanced / Software Controller CPU 1500S software bundle
Dimensions	
Width of the housing front	560 mm
Height of housing front	380 mm
Mounting cutout, width	542 mm
Mounting cutout, height	362 mm
Overall depth	76 mm
Weights	
Weight, approx.	9.5 kg

1/31/2021

last modified: