SIEMENS

Data sheet

6AV7240-8BD17-0PA1

SIMATIC IPC 477D, 15" Touch display; 4 USB (back)+1 USB (front), Ethernet (10/100/1000) Core i7-3517UE; 1x Gbit Ethernet (IE/PN); 1x PROFINET (IRT, 3 ports); 8 GB; 1x RS232 and 1x PCIE; Windows 7 Ultimate 64-bit, Replaceable without drive; SSD 240 GB Standard (MLC); Without SIMATIC software; AC 110/230V industrial power supply unit with NAMUR; without line cable

General information	
Product type designation	IPC477D
Display	
Design of display	15" TFT touch
Screen diagonal	15 in
Resolution (pixels)	
 Horizontal image resolution 	1 280 pixel
 Vertical image resolution 	800 pixel
Backlighting	
 MTBF backlighting (at 25 °C) 	80 000 h
Control elements	
Input device	
Mouse, at front	Front USB 2.0 (500mA)
Keyboard fonts	
 Function keys 	No
alphanumeric keyboard	No
Touch operation	
Design as touch screen	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	
 Mains/voltage failure stored energy time 	10 ms
Power loss	
In full configuration	24 V DC: max. 68 W, PCIe PCB additionally 5 W
Processor	
Processor type	Celeron 827E (1C/1T, 1.40 GHz, 1.5 MB Cache); Core i3-3217UE (2C/4T, 1.60 GHz, 3 MB Cache); Core i7-3517UE (2C/4T, 1.70 (2.80) GHz, 4 MB Cache, iAMT)
Graphic	
Graphics controller	Intel HD graphics controller
Drives	
Optical drives	Optional: DVD±R±RW combi drive; on rear, can be operated from side
Hard disk	2.5" SATA hard disk, at least 320 GB
SSD	Yes; 1x 240 GB SSD, 1x 480 GB SSD
Memory	
Type of memory	DDR3-SDRAM
Main memory	2 / 4 / 8 GB; ECC optional

Capacity of main memory, max.	8 Gbyte
Data areas and their retentivity	5 55,10
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time; optional
Hardware configuration	5.2. Mayo, 120 NB can be decided in the bullet time, optional
Slots	
• free slots	1x PCIe (slot with card retainer), 1x slot for CFAST card
Number of PCI slots	1; Optional
Number of compact flash slots	2; CFast
Interfaces	2, 5, 33.
PROFIBUS/MPI	optionally onboard, isolated, max. 12 Mbps, compatible with CP 5611
Number of PROFINET interfaces	3; 3 ports (IRT, with switch, optional)
USB port	4x USB 3.0 high speed/high current
Connection for keyboard/mouse	USB / USB
serial interface	COM1: 1x RS 232, COM2 (optional): 1x RS 232
Video interfaces	(April 1)
Graphics interface	DVI VGA / DVI integrated
Industrial Ethernet	
Industrial Ethernet interface	Onboard, 2x 10/100 Mbit, RJ45, no plug-in card necessary
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	
Temperature monitoring	Yes
Watchdog	Yes
Status LEDs	Yes
● Fan	No
Monitoring function via network	Optional
EMC	
Interference immunity against discharge of static electricity	
Interference immunity against discharge of static electricity	± 6 KV contact discharge at the front in accordance with IEC 61000-4-2; ±4 kV, housing contact discharge at the back in accordance with IEC 61000-4-2; ± 8 kV air discharge in accordance with IEC 61000-4-2
Interference immunity against high-frequency electromagnet	ic fields
 Interference immunity against high frequency radiation 	10 V/m for 80 - 1 000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2 - 2.7 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz - 80 MHz, 80% AM acc. to IEC 61000-4-6
Interference immunity to cable-borne interference	
 Interference immunity on supply cables Interference immunity on signal cables >30m 	±2 kV (to IEC 1000-4-4; 1995; burst); ±1 kV (to IEC 1000-4-5; 1995; surge symm); ±2 kV (to IEC 1000-4-5; 1995; surge asymm) ±2 kV acc. to IEC 61000-4-4, burst; length > 30 m; ±2 kV acc. to IEC
• Interierence infinitifity on signal capies >50m	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	
IP (at the front)	IP65
IP (rear)	IP20
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
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
ATEX Zone 22	Yes; Optional
• IECEx Zone 2	Yes; Optional
• cULus Class I Zone 2, Division 2	Yes
Marine approval	
Germanischer Lloyd (GL)	Yes
American Bureau of Shipping (ABS)	Yes
Bureau Veritas (BV)	Yes
Det Norske Veritas (DNV)	Yes
Korean Register of Shipping (KRS)	Yes
Lloyds Register of Shipping (LRS)	Yes
Nippon Kaiji Kyokai (Class NK)	Yes
Ambient conditions	
Ambient temperature during operation	
Ambient temperature during operation	0 °C to +45 °C with full configuration
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 °C (no condensation)
Vibrations	
 Vibration resistance during operation acc. to IEC 60068-2-6 	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/s 2 , 11 ms (without hard disk); 50 m/s 2 , 30 ms (with hard disk)
Operating systems	
pre-installed operating system	Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI
without operating system	Yes; Optional
pre-installed operating system	
• Windows 7	Yes; Ultimate 32 bit or 64 bit
Software	
SIMATIC Software	Optionally with pre-installed software bundle SIMATIC WinCC RT
	Advanced / WinAC RTX
Dimensions	
Dimensions	
	Advanced / WinAC RTX
Dimensions Width of the housing front	Advanced / WinAC RTX 415 mm
Dimensions Width of the housing front Height of housing front	Advanced / WinAC RTX 415 mm 310 mm
Dimensions Width of the housing front Height of housing front Mounting cutout, width Mounting cutout, height	Advanced / WinAC RTX 415 mm 310 mm 396 mm
Dimensions Width of the housing front Height of housing front Mounting cutout, width Mounting cutout, height Overall depth	Advanced / WinAC RTX 415 mm 310 mm 396 mm 291 mm
Dimensions Width of the housing front Height of housing front Mounting cutout, width Mounting cutout, height Overall depth • additional mounting depth (optical drive)	Advanced / WinAC RTX 415 mm 310 mm 396 mm 291 mm 76 mm
Dimensions Width of the housing front Height of housing front Mounting cutout, width Mounting cutout, height Overall depth • additional mounting depth (optical drive) Weights	Advanced / WinAC RTX 415 mm 310 mm 396 mm 291 mm 76 mm 26 mm
Dimensions Width of the housing front Height of housing front Mounting cutout, width Mounting cutout, height Overall depth • additional mounting depth (optical drive)	Advanced / WinAC RTX 415 mm 310 mm 396 mm 291 mm 76 mm