SIEMENS

Data sheet   6AV7240-4BD07-0PA0

SIMATIC IPC 477D, 15" Touch display; 4 USB (back)+1 USB (front), Ethernet (10/100/1000) Core I3-3217UE; 2x Gbit Ethernet (IE/PN); PROFIBUS DP 12; 8 GB; 1x RS-232; without PCIE; Windows 7 Ultimate 64-bit, Replaceable without drive; SSD 240 GB Standard (MLC); Without SIMATIC software; 24 V DC industrial power supply

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	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time; optional

Hardware configuration	
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	
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	
• 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 electromagnetic 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	±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)
• Interference immunity on signal cables >30m	±2 kV acc. to IEC 61000-4-4, burst; length > 30 m; ±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

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/s², 11 ms (without hard disk); 50 m/s², 30 ms (with hard disk)

Operating systems

Operating system	Windows 7 Ultimate 32-bit / 64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI
pre-installed operating system	Yes
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

Overall depth	
• additional mounting depth (optical drive)	26 mm

Operator control unit (W x H) in mm	
• Operator panel width	415 mm
• Operator panel height	310 mm
Mounting dimensions in centralized configuration (W x H x D) in mm	
• Width	395 mm
• Height	290 mm
• Depth	76 mm
Mounting cutout/device depth (W x H x T)	395 mm x 290 mm / 82 mm device depth

Weights	
Panel PC in central design, approx.	4.9 kg
last modified:	09/13/2019

09/17/2019