SIEMENS

Data sheet

6AV7240-.B...-...

SIMATIC IPC 477D, 15" TOUCH DISPLAY; 4 USB (BACK) + 1 USB (FRONT), ETHERNET (10/100/1000);



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	100
	10 ms
 Mains/voltage failure stored energy time 	10 115
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
Optical drives	side
Diskette drive	No
Hard disk	2.5" SATA hard disk, at least 320 GB
SSD	Yes; 1x 80 GB, 1x 240 GB SSD, 1x 480 GB SSD
Momony	
Memory Type of memory	DDR3-SDRAM
Main memory	1 GB to 8 GB, ECC optional
Capacity of main memory, max.	8 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags),	512 kbyte; 128 KB can be stored in the buffer time; optional
max.	
Hardware configuration	
Slots	
● free slots	1x PCIe (slot with card retainer), 1x slot for CFAST card
Number of PCI slots	1; Optional
	1; Optional 2; CFast
Number of PCI slots	

PROFIBUS/MPI	Optionally onboard, isolated, max. 12 Mbit/s, no plug-in card
	necessary, CP 5622-compatible
Number of PROFINET interfaces	3; 3 ports (incl. switch)
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, 2 x 10/100 Mbit/s, RJ45, no plug-in card necessary
Integrated Functions	
Monitoring functions	
 Temperature monitoring 	Yes
Watchdog	Yes
Status LEDs	Yes
 Monitoring function via network 	Optional
EMC	
Interference immunity against discharge of static electric	
Interference immunity against discharge of	± 6 KV contact discharge at the front in accordance with IEC
static electricity	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 electroma	agnetic fields
Interference immunity against high frequency	10 V/m for 80 - 1000 MHz and 1.4 - 2 GHz, 80% AM acc. to IEC
radiation	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 	100 A/m; to IEC 61000-4-8
Hz	
Emission of conducted and non-conducted interference	
Interference emission via line/AC current	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
cables	
Degree and class of protection	

IP (at the front)	IP65
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes
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
Marine approval	
 Germanischer Lloyd (GL) 	Yes
 American Bureau of Shipping (ABS) 	Yes
• Bureau Veritas (BV)	Yes
 Det Norske Veritas (DNV) 	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 +50 °C with full configuration
• min.	0 °C
• max.	50 °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 $^\circ\mathrm{C}$ (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/s ² (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s ² (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
pre-installed operating system	

• Windows 7	Yes; Ultimate 32 bits or 64 bits
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
Install. dimensions, centralized design (W x H x D without optical drive) 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
Other	
Warranty period	36 mo; Warranty period
last modified:	11/28/2017