SIEMENS

Data sheet   **6AV7240-.C...-....**

SIMATIC IPC 477D, 15" TOUCH/KEY 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)	50 000 h

Control elements	
Input device	
• Mouse, at front	Front USB 2.0 (500mA)
Keyboard fonts	
• Function keys	Yes
— Number of function keys with LEDs	36
• alphanumeric keyboard	Yes
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. 56 W, PCIe APCB 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
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

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), 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 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 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 - 1000 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
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 °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

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	483 mm
• Operator panel height	310 mm
Install. dimensions, centralized design (W x H x D without optical drive) in mm	
• Width	450 mm
• Height	290 mm
• Depth	76 mm
Mounting cutout/device depth (W x H x T)	450 mm x 290 mm / 82 mm device depth

Weights	
Panel PC in central design, approx.	5.7 kg

Other	
Warranty period	36 mo; Warranty period
last modified:	11/28/2017