

SIMATIC IPC 477D, 12" Touch Display; 4 USB (back), Ethernet (10/100/1000)

General information

Product type designation IPC477D

Display

Design of display 12" TFT touch

Screen diagonal 12 in

Resolution (pixels)

- Horizontal image resolution 1 280 Pixel
- Vertical image resolution 800 Pixel

Control elements

Input device

- Mouse, at front No

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. 59 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)
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Graphic

Graphics controller	Intel HD graphics controller
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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 80 GB, 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
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Hardware configuration

Slots	
<ul style="list-style-type: none"> • free slots • Number of PCI slots • Number of compact flash slots 	1x PCIe (slot with card retainer), 1x slot for CFAST card 1; Optional 2; CFAST

Interfaces

Number of PROFINET interfaces	3
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

<ul style="list-style-type: none"> • Graphics interface 	DVI VGA / DVI integrated
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Industrial Ethernet

<ul style="list-style-type: none"> • Industrial Ethernet interface 	Onboard, 2x 10/100 Mbit, RJ45, no plug-in card necessary
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Integrated Functions

Monitoring functions	
<ul style="list-style-type: none"> • Temperature monitoring • Watchdog • Status LEDs • Monitoring function via network 	Yes Yes Yes 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
Use in hazardous areas	
• ATEX Zone 2	Yes
• ATEX Zone 22	Yes
• IECEx Zone 2	Yes
• 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/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/s ² , 11 ms (without hard disk); 50 m/s ² , 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 bit or 64 bit

Software

SIMATIC Software	Optionally with pre-installed software bundle SIMATIC WinCC RT Advanced / WinAC RTX
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Dimensions

Operator control unit (W x H) in mm	
• Operator panel width	330 mm
• Operator panel height	241 mm
Install. dimensions, centralized design (W x H x D without optical drive) in mm	
• Width	310 mm
• Height	221 mm
• Depth	76 mm
Mounting cutout/device depth (W x H x T)	310 mm x 221 mm / 83 mm device depth

Weights

Panel PC in central design, approx.	3 200 g
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Other

Warranty period	36 mo; Warranty period
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last modified:	09/25/2018
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