

SIMATIC IPC 477D, 12" Touch Display; 4 USB (back), Ethernet (10/100/1000) Celeron U827E; 2x Gbit Ethernet (IE/PN); 2 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
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Display

Design of display	12" TFT touch
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Screen diagonal	12 in
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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 |
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Installation type/mounting

Design	Panel PC, built-in unit
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central design	Yes
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distributed design	No
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Mounting in portrait format possible	Yes
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Supply voltage

Type of supply voltage	100/240 V AC (autorange) 50/60 Hz; optional 24 V DC
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Line frequency

- | | |
|---------------------|-----|
| • Rated value 50 Hz | Yes |
| • Rated value 60 Hz | Yes |

Mains buffering

- | | |
|--|-------|
| • Mains/voltage failure stored energy time | 10 ms |
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Power loss

In full configuration	24 V DC: max. 59 W
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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 • 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; 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
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	
• Temperature monitoring • Watchdog • Status LEDs • Fan • Monitoring function via network	Yes Yes Yes No 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)
- Bureau Veritas (BV)
- Det Norske Veritas (DNV)
- Korean Register of Shipping (KRS)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (Class NK)

Yes
Yes
Yes
Yes
Yes
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

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

Dimensions

Width of the housing front	330 mm
Height of housing front	241 mm
Mounting cutout, width	310 mm
Mounting cutout, height	221 mm
Overall depth	76 mm

Weights

Weight, approx. 3 200 g

last modified:

06/29/2020