

SIMATIC IPC 477D, 15" Touch display; 4 USB (back)+1 USB (front), Ethernet (10/100/1000) Core I3-3217UE; 2x Gbit Ethernet (IE/PN); 8 GB; 1x RS-232; without PCIE; WIN Embedded Standard 7 SP1, English, 64-bit; DVD; 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	15" TFT touch
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Screen diagonal	15 in
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#### 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

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 |
|--|-------|

### Power loss

In full configuration	24 V DC: max. 68 W, PCIe PCB additionally 5 W
<b>Processor</b>	
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)
<b>Graphic</b>	
Graphics controller	Intel HD graphics controller
<b>Drives</b>	
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
<b>Memory</b>	
Type of memory	DDR3-SDRAM
Main memory	2 / 4 / 8 GB; ECC optional
Capacity of main memory, max.	8 Gbyte
<b>Data areas and their retentivity</b>	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time; optional
<b>Hardware configuration</b>	
<b>Slots</b>	
<ul style="list-style-type: none"> <li>• free slots</li> <li>• Number of PCI slots</li> <li>• Number of compact flash slots</li> </ul>	1x PCIe (slot with card retainer), 1x slot for CFAST card 1; Optional 2; CFast
<b>Interfaces</b>	
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
<b>Video interfaces</b>	
<ul style="list-style-type: none"> <li>• Graphics interface</li> </ul>	DVI VGA / DVI integrated
<b>Industrial Ethernet</b>	
<ul style="list-style-type: none"> <li>• Industrial Ethernet interface</li> </ul>	Onboard, 2x 10/100 Mbit, RJ45, no plug-in card necessary
<b>Interrupts/diagnostics/status information</b>	
Bus diagnostics	Yes
<b>Integrated Functions</b>	
<b>Monitoring functions</b>	
<ul style="list-style-type: none"> <li>• Temperature monitoring</li> <li>• Watchdog</li> <li>• Status LEDs</li> </ul>	Yes Yes Yes

- Fan
- Monitoring function via network

No  
Optional

## EMC

<b>Interference immunity against discharge of static electricity</b>	
<ul style="list-style-type: none"> <li>• Interference immunity against discharge of static electricity</li> </ul>	± 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
<b>Interference immunity against high-frequency electromagnetic fields</b>	
<ul style="list-style-type: none"> <li>• Interference immunity against high frequency radiation</li> </ul>	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
<b>Interference immunity to cable-borne interference</b>	
<ul style="list-style-type: none"> <li>• Interference immunity on supply cables</li> <li>• Interference immunity on signal cables &gt;30m</li> <li>• Interference immunity on signal cables &lt; 30m</li> </ul>	±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) ±2 kV acc. to IEC 61000-4-4, burst; length > 30 m; ±2 kV acc. to IEC 61000-4-5, surge; length > 30 m ±1 kV acc. to IEC 61000-4-4; burst; length < 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length > 3 m
<b>Interference immunity against voltage surge</b>	
<ul style="list-style-type: none"> <li>• asymmetric interference</li> <li>• symmetric interference</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge asymmetric ±1 kV acc. to IEC 61000-4-5, surge symmetric
<b>Interference immunity to magnetic fields</b>	
<ul style="list-style-type: none"> <li>• Interference immunity to magnetic fields at 50 Hz</li> </ul>	100 A/m; to IEC 61000-4-8
<b>Emission of conducted and non-conducted interference</b>	
<ul style="list-style-type: none"> <li>• Interference emission via line/AC current cables</li> </ul>	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A
<b>Degree and class of protection</b>	
IP (at the front)	IP65
IP (rear)	IP20
<b>Standards, approvals, certificates</b>	
CE mark	Yes; CE marking / EC Declaration of Conformity
UL approval	Yes
<ul style="list-style-type: none"> <li>• UL 508</li> </ul>	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
<b>Use in hazardous areas</b>	
<ul style="list-style-type: none"> <li>• ATEX Zone 2</li> <li>• ATEX Zone 22</li> </ul>	Yes; Optional Yes; Optional

• IECEx Zone 2	Yes; Optional
• cULus Class I Zone 2, Division 2	Yes
<b>Marine approval</b>	
• 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

### 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<sup>2</sup> (with SSD or CFast); 10 Hz to 58 Hz: 0.0375 mm; 58 Hz to 200 Hz: 4.9 m/s<sup>2</sup> (hard disk)

### Shock testing

- Shock load during operation IEC 60068-2-27; 150 m/s<sup>2</sup>, 11 ms (without hard disk); 50 m/s<sup>2</sup>, 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
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without operating system	Yes; Optional
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pre-installed operating system	
• Windows 7	Yes; Ultimate 32 bit or 64 bit

## 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:**

02/13/2020