

SIMATIC IPC677D (Panel PC), 2x10/100/1000 Mbit/s Ethernet; 4x USB V3.0, 1x serial (COM1); Watchdog, temperature and Fan monitoring; RAID controller onboard; 15" Multitouch (1366x 768) Core I3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X) Solid-state drive 240 GB; 320 GB HDD SATA (2.5"); DVD +/-RW 4 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x PCI without expansion (HW) Windows 7 Ultimate 64 bit SP1, MUI (de, en, fr, es, it) SIMATIC IPC DiagMonitor and Image&Partition Creator enclosed AC 110/230V industrial power supply unit with NAMUR; Power supply cable USA

General information	
Product type designation	IPC677D
Display	
Design of display	15" TFT multi-touch
Screen diagonal	15 in
Resolution (pixels)	
• Horizontal image resolution	1 366 Pixel
• Vertical image resolution	768 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	70 000 h
Control elements	
Touch operation	
• Design as multi-touch screen	Yes; Projective-capacitive
Installation type/mounting	
Design	Panel PC, built-in unit
central design	Yes
Mounting in portrait format possible	Yes
maximum permissible installation angle +/-	20°
Supply voltage	
Type of supply voltage	100/240 V AC (autorange); 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	155 W

Processor	
Processor type	Celeron G1820TE (2C/2T, 2.2 GHz, 2 MB Cache); Core i3-4330TE (2C/4T, 2.4 GHz, 4 MB Cache); Xeon E3-1268L v3 (4C/8T, 2.3 (3.3) GHz, 8 MB Cache, AMT)
Chipset	Intel DH82C226 PCH
Graphic	
Graphics controller	Intel HD graphics controller P4600 GT2 (Xeon, Core i3); Intel HD graphics controller (Celeron)
Drives	
Optical drives	DVD±R±RW combi-drive, optional
Hard disk	3.5" SATA ≥ 500 GB, optional: 3.5" SATA ≥ 1 TB; RAID1 2x 2.5" SATA ≥ 320 GB; solid-state drive (SSD) ≥ 240 GB; all hard disk drives within the enclosure are vibration-damped; RAID1 2x 2.5" SATA ≥ 320 GB byte in removable drive bay
SSD	Yes; ≥ 240 GB optional
Memory	
Type of memory	DDR3-1600 DIMM
Main memory	2 / 4 / 8 / 16 GB; ECC optional
Capacity of main memory, max.	16 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	2 Mbyte; 128 KB can be stored in the buffer time; optional
Hardware configuration	
Slots	
<ul style="list-style-type: none"> <li>• free slots</li> </ul>	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer
<ul style="list-style-type: none"> <li>• Number of PCI slots</li> </ul>	2
<ul style="list-style-type: none"> <li>• Number of PCIe slots</li> </ul>	2
Interfaces	
PROFIBUS/MPI	Optionally onboard, isolated, max. 12 Mbit/s, compatible with CP 5622
Number of industrial Ethernet interfaces	2; 2x RJ45 (independent)
Number of PROFINET interfaces	3; Optional
USB port	4x USB 3.0
Connection for keyboard/mouse	USB / USB
serial interface	1x COM1 (RS 232), optional: 1x COM2 (RS 232)
parallel interface	optional LPT1
Video interfaces	
<ul style="list-style-type: none"> <li>• Graphics interface</li> </ul>	1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)
Industrial Ethernet	
<ul style="list-style-type: none"> <li>• Industrial Ethernet interface</li> </ul>	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
<ul style="list-style-type: none"> <li>— 100 Mbps</li> </ul>	Yes

— 1000 Mbps

Yes

### Interrupts/diagnostics/status information

Bus diagnostics

Yes

### Integrated Functions

#### Monitoring functions

- |                                   |          |
|-----------------------------------|----------|
| • Temperature monitoring          | Yes      |
| • Watchdog                        | Yes      |
| • Status LEDs                     | Yes      |
| • Fan                             | 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 acc. to IEC 61000-4-2; ±8 kV air discharge acc. to IEC 61000-4-2 |
|---|--|

#### Interference immunity against high-frequency electromagnetic fields

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|--|--|
| • 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

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|--|---|
| • Interference immunity on supply cables       | ±2 kV acc. to IEC 61000-4-4, burst; ±1 kV acc. to IEC 61000-4-5, surge symmetric; ±2 kV acc. to IEC 61000-4-5, surge asymmetric |
| • Interference immunity on signal cables >30m  | ±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

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|---------------------------|---|
| • 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

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|---|---------------------------|
| • Interference immunity to magnetic fields at 50 Hz | 100 A/m; to IEC 61000-4-8 |
|---|---------------------------|

#### Emission of conducted and non-conducted interference

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|--|---|
| • 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 61000-6-4:2007, EN 61000-6-2:2005

### Ambient conditions

Ambient temperature during operation	
<ul style="list-style-type: none"> <li>Ambient temperature during operation</li> </ul>	+5 °C to +45 °C with full configuration
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>min.</li> <li>max.</li> </ul>	-20 °C 60 °C

### Operating systems

pre-installed operating system	Windows 7 Ultimate, 32-bit/64-bit, MUI; Windows Embedded Standard 7 P, 32-bit, MUI; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI
without operating system	Yes
pre-installed operating system	
<ul style="list-style-type: none"> <li>Windows 7</li> <li>Windows 10 Enterprise</li> </ul>	Yes; Ultimate 32 bit or 64 bit Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI

### Dimensions

Width of the housing front	416.5 mm
Height of housing front	298 mm
Overall depth	
<ul style="list-style-type: none"> <li>additional mounting depth (optical drive)</li> </ul>	26 mm
Mounting cutout/device depth (W x H x T)	399 mm x 280 mm x 112 mm

### Weights

Panel PC in central design, approx.	12 kg
<b>last modified:</b>	02/13/2020