

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) XEON E3-1268LV3 (4C/8T, 2.3 (3.3) GHz, 8 MB cache VT-D, AMT) 1 TB HDD SATA; DVD +/-RW 16 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 10 Enterprise LTSC 2016, 64 bit, MUI (en, de, fr, it, es) for Xeon; without expansion (software) 24 V DC industrial Power supply

General information

Product type designation	IPC677D
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Display

Design of display	15" TFT multi-touch
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Screen diagonal	15 in
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Resolution (pixels)

• Horizontal image resolution	1 366 Pixel
• Vertical image resolution	768 Pixel

Backlighting

• MTBF backlighting (at 25 °C)	70 000 h
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Control elements

Touch operation

• Design as multi-touch screen	Yes; Projective-capacitive
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Installation type/mounting

Mounting	For horizontal and vertical mounting
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Design	Panel PC, built-in unit
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central design	Yes
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Mounting in portrait format possible	Yes
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maximum permissible installation angle +/-	20°
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Supply voltage

Type of supply voltage	100/240 V AC (autorange); 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	155 W
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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	
• free slots	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer
• Number of PCI slots	2
• Number of PCI slots	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	
• Graphics interface	1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)
Industrial Ethernet	
• Industrial Ethernet interface	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
— 100 Mbps	Yes

— 1000 Mbps

Yes

Interrupts/diagnostics/status information

Bus diagnostics

Yes

Integrated Functions

Monitoring functions

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|-----------------------------------|----------|
| • Temperature monitoring | Yes |
| • Watchdog | Yes |
| • Status LEDs | Yes |
| • Fan | Yes |
| • Monitoring function via network | Optional |

EMC

Interference immunity against discharge of static electricity

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|---|--|
| • 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 |
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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 |
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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 |
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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 |
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Degree and class of protection

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| IP (at the front) | IP65 |
| IP (rear) | IP20 |

Standards, approvals, certificates

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| 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	
• Ambient temperature during operation	+5 °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	Tested according to DIN IEC 60068-2-6: 10 Hz to 58 Hz: 0.075 mm; 58 Hz to 500 Hz 9.8 m/s ² (1g)
Shock testing	
• Shock load during operation	Tested to DIN IEC 60068-2-29: 50 m/s ² (5 g), 30 ms, 100 shocks

Operating systems

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	
• Windows 7	Yes; Ultimate 32 bit or 64 bit
• Windows 10 Enterprise	Yes; Windows 10 Enterprise 2015 or 2016 LTSB, 64-bit, MUI

Software

SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX
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Dimensions

Width of the housing front	416.5 mm
Height of housing front	298 mm
Overall depth	
• additional mounting depth (optical drive)	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
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last modified: 12/04/2019