

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" Touch (1280x 800); with front USB Core I3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X) Solid-state drive 240 GB 4 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x PCI without expansion (HW) without operating system without expansion (software) AC 110/230V industrial power supply unit with NAMUR; Power supply cable Europe

General information

Product type designation	IPC677D
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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
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Control elements

Input device

• Mouse, at front	Front USB 2.0 (500mA)
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Touch operation

• Design as touch screen	Yes; analog, resistive
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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
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 — 100 Mbps — 1000 Mbps	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45 Yes 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	
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 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	
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 61000-6-4:2007, 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/s² (1g)

Shock testing

- Shock load during operation Tested to DIN IEC 60068-2-29: 50 m/s² (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 LTSP, 64-bit, MUI
pre-installed operating system	Yes
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 LTSP, 64-bit, MUI

Software

SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX
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Dimensions

Width of the housing front	415 mm
Height of housing front	310 mm
Overall depth	
• additional mounting depth (optical drive)	26 mm
Mounting cutout/device depth (W x H x T)	396 mm x 291 mm x 112 mm

Weights

Panel PC in central design, approx.	12 kg
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last modified: 05/28/2019