

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; 22" Touch (1920x 1080); with front USB Core I3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X); PROFINET (IRT, 3 ports, CP 1616-compatible); 2 MB buffered SRAM RAID1 2x 320 GB SATA (2.5"); DVD +/-RW 8 GB DDR3 1600 DIMM; 1x PCIE (X16); 1x PCI 2x USB additive (1 slot occupied) 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
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Display

Design of display	22" TFT touch
Screen diagonal	22 in
Resolution (pixels)	
<ul style="list-style-type: none"> Horizontal image resolution 	1 920 Pixel
<ul style="list-style-type: none"> Vertical image resolution 	1 080 Pixel
Backlighting	
<ul style="list-style-type: none"> MTBF backlighting (at 25 °C) 	30 000 h

Control elements

Input device	
<ul style="list-style-type: none"> Mouse, at front 	Front USB 2.0 (500mA)
Touch operation	
<ul style="list-style-type: none"> Design as touch screen 	Yes; analog, resistive

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	
<ul style="list-style-type: none"> Rated value 50 Hz 	Yes
<ul style="list-style-type: none"> Rated value 60 Hz 	Yes
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	10 ms

Power loss	
In full configuration	165 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"> free slots 	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer
<ul style="list-style-type: none"> Number of PCI slots 	2
<ul style="list-style-type: none"> Number of PCIe 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	
<ul style="list-style-type: none"> Graphics interface 	1x DisplayPort and 1x DVI-I; 1x VGA via adapter cable (optional)

Industrial Ethernet	
<ul style="list-style-type: none"> Industrial Ethernet interface 	Onboard, 2x 10 / 100 / 1000 Mbit, RJ45
<ul style="list-style-type: none"> — 100 Mbps 	Yes
<ul style="list-style-type: none"> — 1000 Mbps 	Yes
Interrupts/diagnostics/status information	
Bus diagnostics	Yes
Integrated Functions	
Monitoring functions	
<ul style="list-style-type: none"> Temperature monitoring 	Yes
<ul style="list-style-type: none"> Watchdog 	Yes
<ul style="list-style-type: none"> Status LEDs 	Yes
<ul style="list-style-type: none"> Fan 	Yes
<ul style="list-style-type: none"> Monitoring function via network 	Optional
EMC	
Interference immunity against discharge of static electricity	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Interference immunity on signal cables >30m 	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> asymmetric interference 	±2 kV acc. to IEC 61000-4-5, surge asymmetric
<ul style="list-style-type: none"> symmetric interference 	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
<ul style="list-style-type: none"> Interference immunity to magnetic fields at 50 Hz 	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	
<ul style="list-style-type: none"> 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

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

Dimensions

Width of the housing front	560 mm
Height of housing front	380 mm
Overall depth	
• additional mounting depth (optical drive)	26 mm
Mounting cutout/device depth (W x H x T)	542 mm x 362 mm x 112 mm

Weights

Panel PC in central design, approx.	16 kg
last modified:	02/13/2020