

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; 19" Touch (1366x 768); with front USB Core I3-4330TE (2C/4T, 2.4 GHz, 4 MB cache, VT-X); PROFIBUS/MPI CP 5622-compatible); 2 MB buffered SRAM 500 GB HDD SATA; 8 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 10 Enterprise LTSB 2015, 64 bit, MUI (en, de, fr, it, es); without expansion (software) 24 V DC industrial Power supply

General information	
Product type designation	IPC677D
Display	
Design of display	19" TFT touch
Screen diagonal	19 in
Resolution (pixels)	
• Horizontal image resolution	1 366 pixel
• Vertical image resolution	768 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Input device	
• Mouse, at front	Front USB 2.0 (500mA)
Touch operation	
• Design as touch screen	Yes; analog, resistive
Installation type/mounting	
Mounting	For horizontal and vertical 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
Storage	
Type of memory	DDR3-1600 DIMM

Main memory	2 / 4 / 8 / 16 GB; ECC optional
Capacity of main memory, max.	16 Gbyte
<b>Data areas and their retentivity</b>	
Retentive data area (incl. timers, counters, flags), max.	2 Mbyte; 128 KB can be stored in the buffer time; optional
<b>Hardware configuration</b>	
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
<b>Interfaces</b>	
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
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
<ul style="list-style-type: none"> <li>— 1000 Mbps</li> </ul>	Yes
<b>Interrupts/diagnostics/status information</b>	
Bus diagnostics	Yes
<b>Integrated Functions</b>	
Monitoring functions	
<ul style="list-style-type: none"> <li>• Temperature monitoring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Watchdog</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Fan</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Monitoring function via network</li> </ul>	Optional
<b>EMC</b>	
Interference immunity against discharge of static electricity	
<ul style="list-style-type: none"> <li>• Interference immunity against discharge of static electricity</li> </ul>	±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"> <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
Interference immunity to cable-borne interference	
<ul style="list-style-type: none"> <li>• Interference immunity on supply cables</li> </ul>	±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"> <li>• Interference immunity on signal cables &gt;30m</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge, length > 30 m
<ul style="list-style-type: none"> <li>• Interference immunity on signal cables &lt; 30m</li> </ul>	±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"> <li>• asymmetric interference</li> </ul>	±2 kV acc. to IEC 61000-4-5, surge asymmetric
<ul style="list-style-type: none"> <li>• symmetric interference</li> </ul>	±1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields	
<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
Emission of conducted and non-conducted interference	
<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
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 61000-6-4:2007, EN 61000-6-2:2005		
<b>Ambient conditions</b>			
Ambient temperature during operation			
• min.	5 °C		
• max.	45 °C		
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 <sup>2</sup> (1 g)		
Shock testing			
• Shock load during operation	Tested to DIN IEC 60068-2-29: 50 m/s <sup>2</sup> (5 g), 30 ms, 100 shocks		
<b>Operating systems</b>			
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		
<b>Software</b>			
SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX		
<b>Dimensions</b>			
Width of the housing front	483 mm		
Height of housing front	337 mm		
Mounting cutout, width	465 mm		
Mounting cutout, height	319 mm		
mounting depth	112 mm		
• additional mounting depth (optical drive)	26 mm		
<b>Weights</b>			
Weight, approx.	14 kg		
<b>Classifications</b>			
		<b>Version</b>	<b>Classification</b>
	eClass	14	19-20-01-03
	eClass	12	19-20-01-03
	eClass	9.1	19-20-01-03
	eClass	9	19-20-01-03
	eClass	8	27-24-23-01
	eClass	7.1	27-24-23-01
	eClass	6	27-24-23-01
	ETIM	10	EC001414
	ETIM	9	EC001414
	ETIM	8	EC001414
	ETIM	7	EC001414

<b>Approvals / Certificates</b>	
General Product Approval	

[Miscellaneous](#)



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