

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); PROFIBUS/MPI CP 5622-compatible); 2 MB buffered SRAM Solid-state drive 240 GB 16 GB DDR3 1600 DIMM; 2x PCI without expansion (HW) Windows 10 Enterprise LTSB 2016, 64 bit, MUI (en, de, fr, it, es) for Celeron and i3; SIMATIC IPC DiagMonitor enclosed 24 V DC industrial Power supply

General information	
Product type designation	IPC677D
Display	
Design of display	22" TFT touch
Screen diagonal	22 in
Resolution (pixels)	
• Horizontal image resolution	1 920 pixel
• Vertical image resolution	1 080 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	30 000 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	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
Storage	

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 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
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	
• Temperature monitoring	Yes
• Watchdog	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			
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/s² (1 g)		
Shock testing			
Shock load during operation	Tested to DIN IEC 60068-2-29: 50 m/s² (5 g), 30 ms, 100 shocks		
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 LTSP, 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 LTSP, 64-bit, MUI		
Software			
SIMATIC Software	Optional package with SIMATIC WinCC or WinAC RTX		
Dimensions			
Width of the housing front	560 mm		
Height of housing front	380 mm		
Mounting cutout, width	542 mm		
Mounting cutout, height	362 mm		
mounting depth	112 mm		
additional mounting depth (optical drive)	26 mm		
Weights			
Weight, approx.	16 kg		
Classifications			
		Version	Classification
	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
Approvals / Certificates			
General Product Approval			



[Manufacturer Declaration](#)

[Miscellaneous](#)



General Product Approval				Dangerous goods	
BIS CRS	China RoHS			Dangerous goods information	Test Summary Report UN 38.3

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