

SIMATIC IPC677E (Panel PC), 24" Multitouch (1920x1080); UHD graphic onboard; DP/DVI-D; 3x Gigabit Ethernet (IE/PN); 6x USB 3.1 Gen. 2; 1x serial (COM 1); RAID controller onboard; Watchdog, temperature and fan monitoring; Core i7-8700 (6C/12T, 3.2(4.6) GHz, 12 MB cache, VT-d, AMT); NVRAM; M.2 SSD NVMe 512 GB; SSD 2.5" SATA 960 GB internal; 64 GB DDR4-2666(4x16); 24 V DC industrial power supply Windows 10 Enterprise 2019 LTSC, 64-bit, MUI (en, de, fr, it, es) For Core i7; SIMATIC IPC DiagMonitor enclosed; 2x USB 2.0 (1 slot occupied); 1x PCIe (x16), 1x PCI

General information	
Product type designation	IPC677E
Display	
Design of display	24" TFT multi-touch
Screen diagonal	24 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	
Touch operation	
• Design as touch screen	Yes
• Design as multi-touch screen	Yes; Projective-capacitive
Installation type/mounting	
Mounting	For horizontal and vertical mounting
Design	Panel PC, built-in unit
central design	Yes
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
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	20 ms
Processor	
Processor type	Celeron G4900 (2C/2T, 3.1 GHz, 2 MB cache; VT-d); Core i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); Core i7-8700 (6C/12T, 3.2 (4.6) GHz, 12 MB cache, VT-d, AMT)
Chipset	Intel C246
Graphic	
Graphics controller	Intel UHD Graphics 630 (Core i); Intel UHD Graphics 610 (Celeron)
Drives	
Hard disk	2.5" SATA ≥ 320 GB
SSD	Yes; SSD M.2 NVMe 512 GB; SSD 2.5" SATA 480 / 960 GB; RAID1 2x SSD 2.5" SATA 480 / 960 GB in removable drive bay
Storage	
Type of memory	DDR4-2666 DIMM
Main memory	4 / 8 / 16 / 32 / 64 GB
Capacity of main memory, max.	64 Gbyte
Data areas and their retentivity	
Retentive data area (incl. timers, counters, flags), max.	512 kbyte; 128 KB can be stored in the buffer time
Hardware configuration	

Slots	
• Number of PCI slots	2; Optional
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Interfaces	
Number of industrial Ethernet interfaces	3; 3x Ethernet (RJ45)
serial interface	1x COM
Video interfaces	
• Graphics interface	2x DisplayPort; 1x DVI-D
Industrial Ethernet	
• Industrial Ethernet interface	
— 100 Mbps	Yes
— 1000 Mbps	Yes
Interrupts/diagnostics/status information	
LED status display	1x power, 3x user
Integrated Functions	
Monitoring functions	
• Temperature monitoring	Yes
• Fan	Yes
• Monitoring function via network	Optional
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes; UL 61010-2-201 Second Edition; CAN/CSA-C22.2 No. 61010-2-201 Second Edition
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
Use in hazardous areas	
• ATEX Zone 2	Yes; Optional
• ATEX Zone 22	Yes; Optional
• IECEx Zone 2	Yes; Optional
• IECEx Zone 22	Yes; Optional
• CCC Ex	Yes; Optional
• cULus Class I Zone 2, Division 2	Yes; Optional
• cULus Class II Division 2	Yes; Optional
Marine approval	
• American Bureau of Shipping (ABS)	Yes; Only with SSD
• Bureau Veritas (BV)	Yes; Only with SSD
• Det Norske Veritas (DNV)	Yes; Only with SSD
• Korean Register of Shipping (KRS)	Yes; Only with SSD
• Lloyds Register of Shipping (LRS)	Yes; Only with SSD
• Nippon Kaiji Kyokai (Class NK)	Yes; Only with SSD
• Chinese Classification Society (CCS)	Yes; Only with SSD
Ambient conditions	
Ambient temperature during operation	
• min.	5 °C
• max.	45 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
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 (1 g)
Operating systems	
pre-installed operating system	Windows 10 Enterprise 2016 LTSC or 2019 LTSC or 2021 LTSC 64 bit, MUI

without operating system	Yes; Optional
pre-installed operating system	
<ul style="list-style-type: none"> Windows 10 Enterprise 	Yes; Windows 10 Enterprise 2016 LTSC or 2019 LTSC or 2021 LTSC 64 bit, MUI

Dimensions	
Width of the housing front	585 mm
Height of housing front	363 mm
Mounting cutout, width	569 mm
Mounting cutout, height	347 mm
mounting depth	120 mm

Weights	
Weight, approx.	12.5 kg

Approvals / Certificates

General Product Approval

[Miscellaneous](#)



General Product Approval	For use in hazardous locations
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[BIS CRS](#)

[China RoHS](#)



[CCC-Ex](#)

For use in hazardous locations	Maritime application
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[Type Examination Certificate](#)



Maritime application	other	Dangerous goods
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[NK / Nippon Kaiji Kyokai](#)

[CCS \(China Classification Society\)](#)

[KR \(Korean Register of Shipping\)](#)



[Dangerous goods information](#)

Dangerous goods	Environment
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[Test Summary Report UN 38.3](#)

[Environmental Conformations](#)

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