

Simatic IPC677E 19" 5:4, (1280x1024); Core i7-8700, 6C/12T, 3.2 GHz, 12 MB cache, VT-d, AMT; RAID1 2x SSD 2.5" SATA 480 GB in removable drive bay; 16 GB DDR4-2666 (2x8); 24 V DC industrial power supply; Windows 10 Enterprise 2019 LTSC 64-bit, MUI (en, de, fr, it, sp) for Core i7; without expansion (SW); without expansion (HW); 2x PCI; UHD graphic onboard; 2x DP; 1x DVI-D, 1x serial; 3x GB Ethernet (IE/PN) RJ45; 6x USB 3.1 Gen.2; RAID controller onboard; watchdog, temperature/ fan monitoring

General information	
Product type designation	IPC677E
Installation type/mounting	
Mounting	For horizontal and vertical mounting
Design	Panel PC, built-in unit
Supply voltage	
Type of supply voltage	24 V DC
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	10 ms
Processor	
Processor type	Core i7-8700, 6C/12T, 3.2 GHz
Chipset	Intel CM246
Graphic	
Graphics controller	Intel® UHD Graphics 630
Graphics card	No
Drives	
SSD	Yes; RAID1 2x SSD 2.5" SATA 480 GB internal
Memory	
Type of memory	DDR4-2666 DIMM
Main memory	16 GB RAM
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	
<ul style="list-style-type: none"> free slots Number of PCI slots Number of PCI slots 	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); with card retainer 2; Optional 2; Optional
Interfaces	
Number of industrial Ethernet interfaces	3; 3x Gigabit Ethernet (IE/PN), RJ45
USB port	6x USB 3.1 Gen. 2 (2x type C)
Connection for keyboard/mouse	USB / USB
serial interface	1x COM
Video interfaces	
<ul style="list-style-type: none"> Graphics interface 	2x DisplayPort
Industrial Ethernet	
<ul style="list-style-type: none"> Industrial Ethernet interface <ul style="list-style-type: none"> — 100 Mbps — 1000 Mbps 	3x Ethernet (RJ45) Yes Yes
Integrated Functions	
Monitoring functions	
<ul style="list-style-type: none"> Temperature monitoring Watchdog Fan Monitoring function via network 	Yes Yes Yes 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 ... 2 700 MHz, 80% AM acc. to IEC 61000-4-3; 3 V/m for 2.7 to 6 GHz, 80% AM acc. to IEC 61000-4-3; 10 V for 10 kHz to 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 Interference immunity on signal cables >30m Interference immunity on signal cables < 30m 	±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 ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m ±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 symmetric interference 	±2 kV acc. to IEC 61000-4-5, surge asymmetric ±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
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> min. max. 	5 °C 45 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> min. max. 	-20 °C 60 °C
Relative humidity	
<ul style="list-style-type: none"> Relative humidity 	Tested according to IEC 60068-2-78, IEC 60068-2-30: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% at 25 °C (no condensation)
Vibrations	
<ul style="list-style-type: none"> 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)
Shock testing	
<ul style="list-style-type: none"> Shock load during operation 	Tested to DIN IEC 60068-2-29: 50 m/s ² (5 g), 30 ms, 100 shocks
Operating systems	
pre-installed operating system	Windows 10 Enterprise 2016 LTSP, 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 LTSP, 64 bit, MUI

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

IDEA	4	6607
UNSPSC	15	43-21-15-06

last modified:

11/29/2025 