

SIMATIC IPC627E (Box PC), UHD Graphics onboard; DP/DVI-D; 3x Gigabit Ethernet (IE/PN); 6x USB V3.1 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); RAID1 2x SSD 2.5" SATA 960 GB in removable frame; 16 GB DDR4-2666 (2x8); 110/230 V AC industrial power supply unit with NAMUR; power supply cable Europe; Windows 10 Enterprise 2019 LTSC, 64-bit, MUI (en, de, fr, it, es) For Core i7; SIMATIC IPC Image&Partition Creator supplied; without expansion (HW); 2x PCIe (x16, x4)

Installation type/mounting

Mounting	Wall mounting, portrait mounting
Design	Box PC, built-in unit

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 Rated value 60 Hz 	Yes Yes
Mains buffering	
<ul style="list-style-type: none"> 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

Memory

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	
<ul style="list-style-type: none"> • free slots 	2x PCI; optional: 1x PCI & 1x PCIe (x16); 2x PCIe (x4, x16); 3x PCI & 2x PCIe (x16, x4); 5x PCIe (1x16, 2x4, 2x1); with card retainer
<ul style="list-style-type: none"> • Number of PCI slots 	5; Optional
<ul style="list-style-type: none"> • Number of PCIe slots 	5; Optional

Interfaces

Number of industrial Ethernet interfaces	3; 3x Ethernet (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; 1x DVI-D
--	--------------------------

Industrial Ethernet

<ul style="list-style-type: none"> • Industrial Ethernet interface 	3x Ethernet (RJ45)
<ul style="list-style-type: none"> — 100 Mbps 	Yes
<ul style="list-style-type: none"> — 1000 Mbps 	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 	1x power, 3x user
<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 ... 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 	±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	

• 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 degree of protection	IP20

Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
FCC	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
Marine approval	
• American Bureau of Shipping (ABS)	Yes
• Det Norske Veritas (DNV)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes

Ambient conditions	
Ambient temperature during operation	
• Ambient temperature during operation	+5 °C up to 55 °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: Operation: 5% to 80% at 25 °C (no condensation), Storage: 5% to 95% 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 ² (1 g)
Shock testing	
• 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 or 2019 LTSC 64-bit, MUI
without operating system	Yes; Optional
pre-installed operating system	

- Windows 10 Enterprise

Yes; Windows 10 Enterprise 2016 LTSC or 2019 LTSC 64-bit, MUI

Software

SIMATIC Software

Optional package with SIMATIC WinCC

Dimensions

Width

314 mm

Height

93 mm; For variant 5x PCI(e): 155 mm

Depth

301 mm; incl. mounting rail

last modified:

07/24/2020