

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 i3-8100 (4C/4T, 3.6 GHz, 6 MB cache, VT-d); SSD 2.5" SATA 480 GB internal; 16 GB DDR4-2666 (2x8); 110/230 V AC industrial power supply unit with NAMUR; Power supply cable USA; Windows 10 Enterprise 2016 LTSB, 64 bit, MUI (en, de, fr, it, es) For Celeron and Core i3; without expansion (software); without expansion (HW); 2x PCI

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	
• 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
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"> <li>free slots</li> </ul>	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"> <li>Number of PCI slots</li> </ul>	5; Optional
<ul style="list-style-type: none"> <li>Number of PCIe slots</li> </ul>	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"> <li>Graphics interface</li> </ul>	2x DisplayPort; 1x DVI-D
--	--------------------------

## Industrial Ethernet

<ul style="list-style-type: none"> <li>Industrial Ethernet interface</li> </ul>	3x Ethernet (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

## Integrated Functions

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>Status LEDs</li> </ul>	1x power, 3x user
<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

## EMC

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 ... 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"> <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	

• asymmetric interference	±2 kV acc. to IEC 61000-4-5, surge asymmetric
• symmetric interference	±1 kV acc. to IEC 61000-4-5, surge symmetric
<b>Interference immunity to magnetic fields</b>	
• Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
<b>Emission of conducted and non-conducted interference</b>	
• Interference emission via line/AC current cables	EN 61000-6-3, EN 61000-6-4, CISPR 22 Class B, FCC Class A

<b>Degree and class of protection</b>	
IP degree of protection	IP20

<b>Standards, approvals, certificates</b>	
CE mark	Yes
UL approval	Yes
cULus	Yes
KC approval	Yes
FCC	Yes
EMC	CE, EN 61000-6-3:2007 +A1:2011, EN 61000-6-2:2005
<b>Marine approval</b>	
• American Bureau of Shipping (ABS)	Yes
• Det Norske Veritas (DNV)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes

<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• Ambient temperature during operation	+5 °C up to 55 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• 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)
<b>Vibrations</b>	
• 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)
<b>Shock testing</b>	
• 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 10 Enterprise 2016 LTSC or 2019 LTSC 64-bit, MUI
without operating system	Yes; Optional
<b>pre-installed operating system</b>	
• 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:** 11/28/2020