

SIMATIC IPC627E (Box PC), UHD Graphics onboard; DP/DVI-D; 3x Gigbit 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); NVRAM; M.2 SSD NVMe 512 GB; SSD 2.5" SATA 480 GB internal; 32 GB DDR4-2666 (2x16); 110/230 V AC industrial power supply unit with NAMUR; Power supply cable USA; Windows 10 Enterprise 2019 LTSC, 64-bit, MUI (en, de, fr, it, es) For Core i7; SIMATIC IPC DiagMonitor and Image&Partition Creator supplied; without expansion (HW); 3x PCI, 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"> <li>Rated value 50 Hz</li> <li>Rated value 60 Hz</li> </ul>	Yes Yes
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	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> <li>Number of PCI slots</li> <li>Number of PCI 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 5; Optional 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               <ul style="list-style-type: none"> <li>— 100 Mbps</li> <li>— 1000 Mbps</li> </ul> </li> </ul>	3x Ethernet (RJ45) Yes 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> <li>• Status LEDs</li> <li>• Fan</li> <li>• Monitoring function via network</li> </ul>	<p>Yes</p> <p>1x power, 3x user</p> <p>Yes</p> <p>Optional</p>
<b>EMC</b>	
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> <li>• Interference immunity on signal cables &gt;30m</li> <li>• Interference immunity on signal cables &lt; 30m</li> </ul>	<p>±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</p> <p>±2 kV acc. to IEC 61000-4-5, surge, length &gt; 30 m</p> <p>±1 kV acc. to IEC 61000-4-4; burst; length &lt; 3 m; ±2 kV acc. to IEC 61000-4-4; burst; length &gt; 3 m</p>
Interference immunity against voltage surge	
<ul style="list-style-type: none"> <li>• asymmetric interference</li> <li>• symmetric interference</li> </ul>	<p>±2 kV acc. to IEC 61000-4-5, surge asymmetric</p> <p>±1 kV acc. to IEC 61000-4-5, surge symmetric</p>
Interference immunity to magnetic fields	
<ul style="list-style-type: none"> <li>• Interference immunity to magnetic fields at 50 Hz</li> </ul>	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	
<ul style="list-style-type: none"> <li>• Interference emission via line/AC current cables</li> </ul>	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
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	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping (ABS)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Nippon Kaiji Kyokai (Class NK)</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>Ambient conditions</b>	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<p>5 °C</p> <p>55 °C</p>
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<p>-20 °C</p> <p>60 °C</p>
Relative humidity	
<ul style="list-style-type: none"> <li>• Relative humidity</li> </ul>	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"> <li>• Vibration resistance during operation acc. to IEC 60068-2-6</li> </ul>	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)
Shock testing	
<ul style="list-style-type: none"> <li>• Shock load during operation</li> </ul>	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 LTSP or 2019 LTSC 64-bit, MUI
without operating system	Yes; Optional
pre-installed operating system	
<ul style="list-style-type: none"> <li>• Windows 10 Enterprise</li> </ul>	Yes; Windows 10 Enterprise 2016 LTSP or 2019 LTSC 64-bit, MUI
<b>Software</b>	
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:** 1/31/2021 