

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); SSD 2.5" SATA 480 GB internal; 8 GB DDR4-2666 (2x4); 24 V DC industrial power supply Windows 10 IoT Enterprise 2021 LTSC, 64-bit, MUI (en,de,fr,it,es;); for Core i7; with TPM; 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                                            |                                                                                                                                                                 |
| • 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                                                     |                                                                                                                                                                 |
| • 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                           |
| • Number of PCI slots                                     | 5; Optional                                                                                                                                                     |
| • Number of PCI 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                                          |                                                                                                                                                                 |
| • Graphics interface                                      | 2x DisplayPort; 1x DVI-D                                                                                                                                        |
| Industrial Ethernet                                       |                                                                                                                                                                 |
| • Industrial Ethernet interface                           | 3x Ethernet (RJ45)                                                                                                                                              |
| — 100 Mbps                                                | Yes                                                                                                                                                             |
| — 1000 Mbps                                               | Yes                                                                                                                                                             |
| Integrated Functions                                      |                                                                                                                                                                 |
| Monitoring functions                                      |                                                                                                                                                                 |
| • Temperature monitoring                                  | Yes                                                                                                                                                             |
| • Watchdog                                                | Yes                                                                                                                                                             |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Status LEDs</li> <li>• Fan</li> <li>• Monitoring function via network</li> </ul>                                                                                       | 1x power, 3x user<br>Yes<br>Optional                                                                                                                                                                                                                                                       |
| <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> | ±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<br>±2 kV acc. to IEC 61000-4-5, surge, length > 30 m<br>±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"> <li>• asymmetric interference</li> <li>• symmetric interference</li> </ul>                                                                                                   | ±2 kV acc. to IEC 61000-4-5, surge asymmetric<br>±1 kV acc. to IEC 61000-4-5, surge symmetric                                                                                                                                                                                              |
| 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>                                             | Yes<br>Yes<br>Yes                                                                                                                                                                                                                                                                          |
| <b>Ambient conditions</b>                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                            |
| Ambient temperature during operation                                                                                                                                                                            |                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>                                                                                                                                        | 5 °C<br>55 °C                                                                                                                                                                                                                                                                              |
| Ambient temperature during storage/transportation                                                                                                                                                               |                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>                                                                                                                                        | -20 °C<br>60 °C                                                                                                                                                                                                                                                                            |
| 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 LTSC 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 LTSC or 2019 LTSC 64-bit, MUI                                                                                                                                                                                                                              |
| <b>Software</b>                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                            |
| SIMATIC Software                                                                                                                                                                                                | Optional package with SIMATIC WinCC                                                                                                                                                                                                                                                        |
| <b>Dimensions</b>                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                            |

|        |                                      |
|--------|--------------------------------------|
| Width  | 314 mm                               |
| Height | 93 mm; For variant 5x PCI(e): 155 mm |
| Depth  | 301 mm; incl. mounting rail          |

**last modified:** 6/5/2024 