

SIMATIC IPC547J (rack PC, 19", 4 U); interfaces: 2x USB 3.0 on the front; COM1, audio on the rear side; 7 slots: 5x PCI Express, 2x PCI, temperature and fan monitoring; watchdog; card retainer Xeon W-1270E (8C/16T, 3.4 (4.8) GHz, 16 MB cache), mainboard (chipset W480E, 3x Gbit Ethernet, 1x DVI-D, 2x DisplayPort, 6x USB 3.1 Gen.2, 2x USB 2.0 internal, AMT), RAID1, 2x 960 GB SSD 2.5 SATA, enclosure (short) with drive support type C (for internal installation/ 0.2 g vibration, 2 g shock), blue chromated, 100/240 V AC industrial power supply unit, power supply cable Europe, 16 GB DDR4 SDRAM (2x 8 GB), dual channel, without expansion, Windows Server 2019 Standard Edition including 5 clients, 64-bit, MMUI (en/de/fr/it/es), (only with W480E chipset/Xeon), without expansions,

| Installation type/mounting                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting                                                                                       | For horizontal and vertical installation; prepared for telescopic rails; 19" mounting bracket can be removed externally; tower kit (optional)                                                                                                                                                                                                                                                                                                                                                             |
| Design                                                                                         | Rack PC, 19", 4U                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Supply voltage                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Type of supply voltage                                                                         | 100/240 V AC (autorange) 50 / 60 Hz; optional redundant 100/240 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Line frequency                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>Rated value 50 Hz</li> <li>Rated value 60 Hz</li> </ul> | Yes<br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mains buffering                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>     | 20 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Processor                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Processor type                                                                                 | Intel Xeon W-1270E (8C/16T, 3.4 (4.8) GHz, 16 MB Cache); Intel Core i9-10900E (10C/20T, 2.8 (4.7) GHz, 20 MB Cache); Intel Core i7-10700E (8C/16T, 2.9 (4.5) GHz, 16 MB Cache); Intel Core i5-10500E (6C/12T, 3.1 (4.2) GHz, 12 MB Cache); Intel Core i3-10100E (4C/8T, 3.2 (3.8) GHz, 6 MB Cache)                                                                                                                                                                                                        |
| Chipset                                                                                        | Intel W480E / Intel H410                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Graphic                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Graphics controller                                                                            | Intel® UHD Graphics 630                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Drives                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Hard disk                                                                                      | 1 TB HDD 3.5" SATA, 2x 1 TB HDD 3.5" SATA, 1 TB HDD 3.5" SATA + 960 GB SSD 2.5" SATA, RAID1, 2x 1 TB HDD 3.5" SATA, RAID1, 2x 1 TB HDD [Enterprise] 3.5" SATA, RAID1, 2x 2 TB HDD [Enterprise] 3.5" SATA, RAID1, 2x 2 TB HDD [Enterprise] 3.5" SATA + 2 TB HDD [Enterprise] 3.5" SATA as hot spare, RAID1, 2x 2 TB HDD [Enterprise] 3.5" SATA + 960 GB SSD 2.5" SATA, RAID5, 3x 2 TB HDD [Enterprise] 3.5" SATA, RAID5, 3x 2 TB HDD [Enterprise] 3.5" SATA + 2 TB HDD [Enterprise] 3.5" SATA as hot spare |
| SSD                                                                                            | Yes; 480 GB 2.5" SATA SSD, 1x 960 GB 2.5" SATA SSD, 2x 480 GB 2.5" SATA SSD, RAID1 2x 480 GB 2.5" SATA SSD, RAID1 2x 960 GB 2.5" SATA SSD; 1x 512 GB M.2 NVMe SSD, 1x 1 024 GB M.2 NVMe SSD                                                                                                                                                                                                                                                                                                               |
| Slot for drives                                                                                | Mounting internally in vibration/shock-absorbing drive cage Type B or mounting on the front in removable trays (hot swap in RAID configurations) in drive cage Type A; mounting internally on the fixed drive cage optional                                                                                                                                                                                                                                                                               |
| Memory                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Main memory                                                                                    | 4 GB to 128 GB DDR4 2933 SDRAM DIMM                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Capacity of main memory, max.                                                                  | 128 Gbyte                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Hardware configuration                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Slots                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <ul style="list-style-type: none"> <li>free slots</li> </ul>                                   | 7 spare slots for expansions (all long); mainboard with H410 chip set: 1x PCIe (x16) (16 lane) Gen 3, 1x PCIe (x16) (1 lanes) Gen 3, 1x PCIe (x8) (1 lane) Gen 3, 1x PCIe (x4) (1 lane) Gen 3, 1x PCIe (x4) (1 lane) Gen 3, 2x PCI; mainboard with W480E chip set: 1x PCIe (x16) (16 lane) Gen 3, 1x PCIe (x16) (4 lanes) Gen 3, 1x PCIe (x8) (1 lane) Gen 3, 1x PCIe (x4) (4 lane) Gen 3, 1x PCIe (x4) (1 lane) Gen 3, 2x PCI                                                                            |

| Interfaces                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interfaces/bus type                                                             | mainboard (H410 chip set): 2x Intel Gigabit Ethernet (RJ45, teaming-capable), USB 3.1 Gen 1: 2x on rear, 2x on front, USB 2.0: 4x on rear, 1x internal e.g. for software dongle with optional interlock, 1x DisplayPort V1.2, 1x DVI-D, 1x COM1, audio: line in, line out, micro; mainboard (W480E chip set): 3x Intel Gigabit Ethernet (RJ45, teaming-capable), USB 3.1 Gen 2: 4x type A, 2x type C, on rear, USB 3.1 Gen 1: 2x on front, USB 2.0: 2x internal e.g. for software dongle with optional interlock, 2x DisplayPort V1.2, 1x DVI-D, 1x COM1, audio: line in, line out, micro |
| USB port                                                                        | mainboard (H410 chip set): USB 3.1 Gen 1: 2x on rear, 2x on front, USB 2.0: 4x on rear, 1x internal e.g. for software dongle with optional interlock; mainboard (W480E chip set): USB 3.1 Gen 2: 4x type A, 2x type C, on rear, USB 3.1 Gen 1: 2x on front, USB 2.0: 2x internal e.g. for software dongle with optional interlock                                                                                                                                                                                                                                                         |
| Connection for keyboard/mouse                                                   | USB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| serial interface                                                                | COM1: 1x RS 232 or RS 485; COM2 (optional) 1x RS 232                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Multimedia                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Audio In/Out                                                                  | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| • Microphone In                                                                 | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Video interfaces                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Graphics interface                                                            | 2x DisplayPort and 1x DVI-D onboard; 1x VGA via DP-VGA adapter cable (optional); graphics card PCIe (x16), Triple Head (3x mini DisplayPort, 2 GB graphics memory, 3x mini DisplayPort to DisplayPort adapter cable) (optional)                                                                                                                                                                                                                                                                                                                                                           |
| Industrial Ethernet                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Industrial Ethernet interface                                                 | 2x or 3x Gigabit Ethernet (IE/PN), RJ45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| — 100 Mbps                                                                      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| — 1000 Mbps                                                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Integrated Functions                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Monitoring functions                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Temperature monitoring                                                        | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| • Watchdog                                                                      | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| • Status LEDs                                                                   | POWER, HDD, ETHERNET 1, ETHERNET 2, ETHERNET 3, WATCHDOG, TEMP, FAN, HDD3 ALARM, HDD2 ALARM, HDD1 ALARM, HDD0 ALARM                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| • Fan                                                                           | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| • Monitoring function via network                                               | Optional                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| EMC                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Interference immunity against discharge of static electricity                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Interference immunity against discharge of static electricity                 | ±4 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             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • 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                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • 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                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Interference immunity on signal cables >30m                                   | ±2 kV acc. to IEC 61000-4-5, surge, length > 30 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| • Interference immunity on signal cables < 30m                                  | ±1 kV acc. to IEC 61000-4-4, Burst                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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                             | 30 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, CAN/CSA CISPR 22 Class B, EN 55032 Class B; FCC Class A; KN32 Class B, EN 61000-3-2 Class D; EN 61000-3-3                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Compliance with line harmonic distortion limits                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| • Compliance with line harmonic distortion acc. to IEC 61000-3-2, IEC 61000-3-3 | Yes; EN 61000-3-2 Class D; EN 61000-3-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Degree and class of protection                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| IP (at the front)                                                               | IP30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

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|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP (rear)                                                     | IP20                                                                                                                                                                             |
| <b>Standards, approvals, certificates</b>                     |                                                                                                                                                                                  |
| CE mark                                                       | Yes; For use in industrial areas as well as domestic, business and commercial environments (emitted interference: EN 61000-6-3:2007 +A1:2011, noise immunity: EN 61000-6-2:2005) |
| CSA approval                                                  | Yes; CAN/CSA-C22.2 No. 61010-2-201 Second Edition                                                                                                                                |
| UL approval                                                   | UL 61010-2-201 Second Edition, File E85972                                                                                                                                       |
| cULus                                                         | Yes; UL 61010-2-201 Second Edition; CAN/CSA-C22.2 No. 61010-2-201 Second Edition                                                                                                 |
| RCM (formerly C-TICK)                                         | Yes                                                                                                                                                                              |
| KC approval                                                   | Yes                                                                                                                                                                              |
| EAC (formerly Gost-R)                                         | Yes                                                                                                                                                                              |
| EMC                                                           | EN 61000-6-3; EN 61000-6-4, CAN/CSA CISPR 22 Class B, EN 55032 Class B; FCC Class A; KN32 Class B, EN 61000-3-2 Class D; EN 61000-3-3                                            |
| Dust protection                                               | With front door closed: G2 EN 779, 99% of particles > 0.5 mm are filtered                                                                                                        |
| <b>Ambient conditions</b>                                     |                                                                                                                                                                                  |
| Ambient temperature during operation                          |                                                                                                                                                                                  |
| • Ambient temperature during operation                        | 0 °C to +40 °C with full configuration                                                                                                                                           |
| 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 85 % at 30 °C (no condensation), storage / transport: 5 % to 95 % at 25 / 55 °C (no condensation)          |
| Vibrations                                                    |                                                                                                                                                                                  |
| • Vibration resistance during operation acc. to IEC 60068-2-6 | Tested according to IEC 60068-2-6, 10 cycles; 20 to 58 Hz: 0.015 mm; 58 to 200 Hz: 2 m/s <sup>2</sup> (0.2 g)                                                                    |
| Shock testing                                                 |                                                                                                                                                                                  |
| • Shock load during operation                                 | Tested according to IEC 60068-2-27; half-sine: 9.8 m/s <sup>2</sup> (1 g), 20 ms, 100 shocks per axis                                                                            |
| <b>Operating systems</b>                                      |                                                                                                                                                                                  |
| pre-installed operating system                                | Windows 10 IoT Enterprise 2019 LTSC, multi-language (64-bit); Windows Server 2019 Standard Edition incl. 5 clients, multi-language (64-bit)                                      |
| Additional info on operating system                           | Multi-Language User Interface (MUI): 5 languages (English, German, French, Spanish, Italian)                                                                                     |
| without operating system                                      | Yes                                                                                                                                                                              |
| <b>Software</b>                                               |                                                                                                                                                                                  |
| SIMATIC Software                                              | Optional package with SIMATIC WinCC                                                                                                                                              |
| <b>Dimensions</b>                                             |                                                                                                                                                                                  |
| Width                                                         | 430 mm                                                                                                                                                                           |
| Height                                                        | 177 mm; 4U                                                                                                                                                                       |
| Depth                                                         | 446 mm; Device with short enclosure: 356 mm                                                                                                                                      |
| <b>last modified:</b>                                         | 7/12/2022                                                                                     |