

SIMATIC IPC RW-545A (rack IPC, 19", 4 U); MB: chipset R680E, 2x 1 Gbit LAN(IE/PN), RJ45; 1x 2.5 Gbit LAN(IE/PN), RJ45; 3x display port, 1x DVI-D; 4x USB 3.2 Gen. 2 type A, 2x USB 3.2 Gen. 2x2 type C, 2x USB 2.0 type A internal, 2x M.2 slot, TPM2.0, audio; 7 slots: 1x PCI, 2x PCIe x16(1x 16L or 2x 8L), 1x PCIe x8(4L), 3x PCIe x4(4L), 2x USB 3.1 type A, 12x status LEDs on the front; Core i7-12700E 12C(8P+4E)/20T, 2.1 (4.8) GHz, 25 MB cache, iAMT 2 TB HDD 3.5" SATA 1 TB SSD M.2 NVMe (1 slot M.2 occupied) 64 GB DDR5 SDRAM (2x 32 GB) enclosure with drive support type B (for internal installation; 0.2 g vibration, 2 g shock), blue chromated graphics card NVIDIA RTX A5000 (24 GB, 4x DP: without adapter) (2 slots occupied), 850 W 100/240 V AC industrial power supply unit without operating system; without USB flash drive (D&D) supply cable Europe

| General information | |
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| Product type designation | RW-545A |
| 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"> Rated value 50 Hz Rated value 60 Hz | <p>Yes</p> <p>Yes</p> |
| Mains buffering | |
| <ul style="list-style-type: none"> Mains/voltage failure stored energy time | 20 ms |
| Processor | |
| Processor type | Core i9-12900E 16C(8P+8E)/24T, 2.3 (5.0) GHz, 30 MB cache; Core i7-12700E 12C(8P+4E)/20T, 2.1 (4.8) GHz, 25 MB cache; Core i5-12500E 6C(4P)/12T, 2.9 (4.5) GHz, 18 MB cache; Core i3-12100E 4C(4P)/8T, 3.2 (4.2) GHz, 12 MB cache; |
| Chipset | Intel R680E |
| Graphic | |
| Graphics controller | Intel® UHD Graphics 730 / 770 |
| Graphics card | Yes; NVIDIA T400, RTX A2000, RTX A4000, RTX A5000 |
| Drives | |
| Hard disk | 1x 2 TB HDD 3.5" SATA, 2x 2 TB HDD 3.5" SATA, RAID1 2x 2 TB HDD [Enterprise] 3.5" SATA, RAID1 2x 4 TB HDD [Enterprise] 3.5" SATA |
| SSD | Yes; 480 GB 2.5" SATA SSD, 1x 960 GB 2.5" SATA SSD, 2x 960 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, 2x 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 | 8 GB to 128 GB DDR5 4800 SDRAM DIMM |
| Capacity of main memory, max. | 128 Gbyte |
| Hardware configuration | |
| Slots | |
| <ul style="list-style-type: none"> free slots Number of PCI slots Number of PCI slots number of M.2 slots | <p>7 free slots for expansions (all long); 2x PCIe x16 (1 x 16 or 2 x 8 lanes) Gen 4; 1x PCIe x8 (4 lanes) Gen 3; 1x PCIe x4 (4 lanes) Gen 3; 1x PCIe x4 (4 lanes) Gen 4; 1x PCIe x4 (4 lanes) Gen 4; 1x PCI</p> <p>1</p> <p>6</p> <p>2</p> |
| Interfaces | |
| Interfaces/bus type | 2x Gigabit Ethernet (IE/PN), RJ 45, teaming-capable; 1x 2.5 Gigabit Ethernet (IE/PN), RJ 45, teaming-capable; USB 3.2 Gen 2: 4x type A, USB 3.2 Gen 2x2: 2x type C, on rear; USB 3.1 Gen 1: 2x on front, USB 2.0: 2x internal e.g. for software dongle with option interlock, 3x DisplayPort V1.4a, 1x DVI-D, 1x COM1 and 1x COM2 (optional), audio: line in, line out, micro |

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| USB port | USB 3.2 Gen 2: 4x type A, USB 3.2 Gen 2x2: 2x type C, on rear; 2x USB 3.1 Gen. 2 type A internally, e.g. for software dongle with optional interlock; 2x USB 3.1 Gen. 1 type A on the front, can be used with door closed |
| Connection for keyboard/mouse | USB |
| serial interface version | COM1 (optional): 1x RS 232 or RS 485; COM2 (optional) 1x RS 232 |
| Multimedia | |
| • Audio In/Out | Yes |
| • Microphone In | Yes |
| Video interfaces | |
| • Graphics interface | 3x DisplayPort; 1x DVI-D |
| Industrial Ethernet | |
| • Industrial Ethernet interface | 3x Ethernet (RJ45) |
| — 100 Mbps | Yes |
| — 1000 Mbps | Yes |
| • number of interfaces (1 000 Mbps) | 2 |
| • number of interfaces (2 500 Mbps) | 1 |
| Interrupts/diagnostics/status information | |
| LED status display | POWER, HDD, ETHERNET 1, ETHERNET 2, ETHERNET 3, WATCHDOG, TEMP, FAN, HDD3 ALARM, HDD2 ALARM, HDD1 ALARM, HDD0 ALARM |
| Integrated Functions | |
| Monitoring functions | |
| • Temperature monitoring | Yes |
| • Watchdog | Yes |
| • Fan | Yes |
| 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, CISPR 32, EN 55032 Class B; FCC Class A; KS C 9832; 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 |
| IP (rear) | IP20 |
| Standards, approvals, certificates | |
| 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) |
| UKCA mark | Yes |
| 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 |
| EMC | EN 61000-6-3; EN 61000-6-4, CISPR 32, EN 55032 Class B; FCC Class A; KS C 9832; EN 61000-3-2 Class D; EN 61000-3-3 |

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| Dust protection | With front door closed: G2 EN 779, 99% of particles > 0.5 mm are filtered |
| Ambient conditions | |
| Ambient temperature during operation | |
| • min. | 0 °C; Max. 10 °C/h (no condensation) |
| • max. | 40 °C |
| Ambient temperature during storage/transportation | |
| • min. | -20 °C |
| • max. | 60 °C |
| Relative humidity | |
| • Relative humidity | tested according to IEC 60068-2-78, IEC 60068-2-30: operation: 0 °C to 31 °C: 5-85%; decreasing linearly to 5-50% at 40 °C (no condensation), storage/transportation: 5% to 95% at 25 °C to 55 °C (gradient: ≤ 20 K/h; 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 ² (0.2 g) |
| Shock testing | |
| • Shock load during operation | Tested according to IEC 60068-2-27; half-sine: 9.8 m/s ² (1 g), 20 ms, 100 shocks per axis |
| Operating systems | |
| pre-installed operating system | Windows 10 IoT Enterprise 2021 LTSC, Windows 11 IoT Enterprise 2024 LTSC |
| Additional info on operating system | Multi-Language User Interface (MUI): 5 languages (English, German, French, Spanish, Italian) |
| without operating system | Yes |
| Software | |
| SIMATIC Software | Optional package with SIMATIC WinCC |
| Dimensions | |
| Width | 430 mm |
| Height | 177 mm; 4U |
| Depth | 446 mm |
| Approvals / Certificates | |
| General Product Approval | |



[BIS CRS](#)

General Product Approval

[KC](#)

last modified:

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