

SIMATIC IPC RC-545A (rack IPC, 19", 4 U); MB: chipset H610E, 2x 1 Gbit LAN(IE/PN) RJ45, 2x display port, 1x DVI-D, 2x USB 3.2 generation 1 type A, 4x USB 2.0 type A, 1x USB 2.0 type A internal, TPM2.0 audio, COM; 7 slots: 2x PCI, 1xPCIe x16(16L), 1xPCIe x16(2L), 1xPCIe x8(1L), 2x PCIe x4(1L); 2x USB 3.1 type A, 7x status LEDs on the front Core i7-12700E 12C(8P+4E)/20T, 2.1 (4.8) GHz, 25 MB cache 960 GB SSD 2.5" SATA without NVMe drives 32 GB DDR5 SDRAM (2x 16 GB) enclosure (short) with drive support type C (for internal installation; 0.2 g vibration, 2 g shock), blue chromated 550 W 100/240 V AC industrial power supply unit Windows 10 IoT Enterprise 2021 LTSC for Core i7/i9; without USB flash drive (restore image; D&D) power supply cord China

General information	
Product type designation	RC-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	100/240V AC (autorange) 50/60 Hz
Line frequency	
<ul style="list-style-type: none"> Rated value 50 Hz Rated value 60 Hz 	Yes Yes
Mains buffering	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	20 ms
Processor	
Processor type	Core i7-12700E 12C(8P+4E)/20T, 2.1 (4.8) GHz, 25 MB cache; Core i5-12500E 6C(6P)/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 H610E
Graphic	
Graphics controller	Intel® UHD Graphics 730 / 770
Graphics card	Yes; NVIDIA T400
Drives	
Hard disk	1x 2 TB HDD 3.5" SATA, 2x 2 TB HDD 3.5" SATA
SSD	Yes; 1x 480 GB 2.5" SATA SSD, 1x 960 GB 2.5" SATA SSD, 2x 960 GB 2.5" SATA SSD
Slot for drives	mounting internally in vibration/shock-absorbing drive cage Type B or mounting on the front in removable trays in drive cage Type A; mounting internally on the fixed drive cage optional
Memory	
Main memory	8 GB to 64 GB DDR5 4800 SDRAM DIMM
Capacity of main memory, max.	64 Gbyte
Hardware configuration	
Slots	
<ul style="list-style-type: none"> free slots Number of PCI slots Number of PCI slots 	7 spare slots for expansions (all long); 1x PCIe x16 (16L) Gen4; 1x PCIe x16 (2L) Gen3; 1x PCIe x8 (1L) Gen3; 2x PCIe x4 (1L) Gen3; 2x PCI 2 5
Interfaces	
Interfaces/bus type	1x Gigabit Ethernet (IE/PN), RJ 45, teaming-capable; USB 3.2 Gen 1: 2x type A on rear, USB 2.0: 2x type A on rear, USB 3.1 Gen 1: 2x on front, USB 2.0: 1x internal e.g. for software dongle with option interlock, 2x DisplayPort V1.4a, 1x DVI-D, 1x COM1, 1x COM2 and 1x COM3 (optional), audio: line in, line out, micro
USB port	USB 3.2 Gen 1: 2x type A on rear, USB 2.0: 2x type A on rear, USB 3.1 Gen 1: 2x on front, USB 2.0: 1x internal
Connection for keyboard/mouse	USB
serial interface version	COM1: 1x RS 232 or RS 485; COM2 and COM3 (optional) 1x RS 232
Multimedia	

• Audio In/Out	Yes
• Microphone In	Yes
Video interfaces	
• Graphics interface	2x DisplayPort; 1x DVI-D
Industrial Ethernet	
• Industrial Ethernet interface	2x Ethernet (RJ45)
— 100 Mbps	Yes
— 1000 Mbps	Yes
• number of interfaces (1 000 Mbps)	2
Interrupts/diagnostics/status information	
LED status display	POWER, HDD, ETHERNET 1, ETHERNET 2, WATCHDOG, TEMP, FAN
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)
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; in preparation
EAC (formerly Gost-R)	Yes
FCC	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
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
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; Device with short enclosure: 356 mm
Approvals / Certificates	
General Product Approval	



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