

# SIMATIC Rack PC 547B – Maximum Performance at an Attractive Price



with Intel® Core™2 Duo Processors

# simatic pc RACK PC 547B

The new 19 inch SIMATIC Rack PC 547B is equipped with powerful and energy-saving Intel® Core™2 Duo processors as well as with chip set and memory technology of the latest generation.

Thanks to its **attractive price**, it is perfectly suitable for the cost-effective realization of industrial applications requiring maximum PC system power (state-of-the-art) such as are common in the fields of process visualization or industrial image processing.

**SIEMENS**

# SIMATIC Rack PC 547B – maximum performance at an attractive price ...

## Latest PC technology for increased productivity

The 19 inch SIMATIC Rack PC 547B is equipped with latest PC technology. It offers maximum system power for increased productivity through faster data processing at an attractive price.

### Maximum system power:

- Intel® Core™2 Duo processors, 64 bit
- Intel® chip set 945G Express
- Intel® graphics media accelerator GMA950
- Front-side bus with 1066 MHz
- PCI Express x16 and x1 slots
- DDR2 667 memory technology up to 4 Gbyte with dual-channel support
- SATA hard disks up to 250 Gbyte

## ... with Intel® Core™2 Duo processor



## Higher ruggedness for reliable 24h continuous operation in industrial environments

- Individual product design with new front and fully lacquered, dirt-repellent surfaces;
- Active heat dissipation concept and optimum component arrangement ensure 24h continuous operation in full configuration with maximum computing power – without power loss (throttling) – from 5 to 40 °C ambient temperature (for all processor variants);
- Dust protection through positive pressure ventilation with temperature-controlled fans and replaceable dust filter for increased service life of all internal components;
- Rugged full-metal enclosure with high electromagnetic compatibility (EMC) and compact mounting depth for installation in space-saving control cabinets with only 500 mm depths;
- Special hard disk mounts, card retainers and power plug interlocking for increased vibration/shock resistance – also with telescopic rail mounting.

## Reduced expenditures thanks to high flexibility and user-friendliness in terms of commissioning, operation, service and maintenance

- Time- and cost-saving commissioning due to completely configured ready-to-run systems with installed and activated operating system
- Fast restoration of the as-delivered state of the hard disc contents due to enclosed restore DVD
- Low noise emission due to controlled fan
- Fast identification and replacement of hard disks in faults cases due to accurate numbering on the enclosure
- Fast replacement of the front-side filter
- High number of integrated interfaces and PCI/PCIe expansion slots. The powerful PCI-Express technology allows for the use of state-of-the-art expansion cards such as PCIe x16 graphics card for the connection of two monitors.

## Front side design

- 19" full-metal enclosure (lacquered)
- prepared for telescopic rails
  - for horizontal and vertical installation
  - mounting bracket removable from the outside

- Hard disk removable frame, hot swap with RAID1 configuration

- Optical drives:
- DVD-ROM
  - DVD±R/RW

- Front cover with openings for heat dissipation and access to the dust filter and fans

- Floppy drive

- Operation display

- ON/OFF switch

- Display for hard disk access

- Fan and temperature status

- 2 x USB2.0 interfaces

## ... with Intel® Core™2 Duo processor

The SIMATIC Rack PC 547B is available as control cabinet device for horizontal and vertical installation and with an optional tower kit for application as industrial workstation or server in control stations and technical offices.

The memory configuration in the dual-channel mode and the serial ATA hard disks with 250 Gbyte considerably increase the system's processing speed. Via the Gigabit-Ethernet interface, the fast transfer of large data volumes is possible.



### Increased system availability due to high data security for the minimization of downtimes

The SIMATIC Rack PC547B is equipped with high-quality components and parts with high MTBF (mean time between failure). It offers a high system availability, e.g. through the integrated diagnostics and signaling functions for temperature, fans and watchdog. The front LED ensures an efficient self-diagnosis of the temperature or fan status.

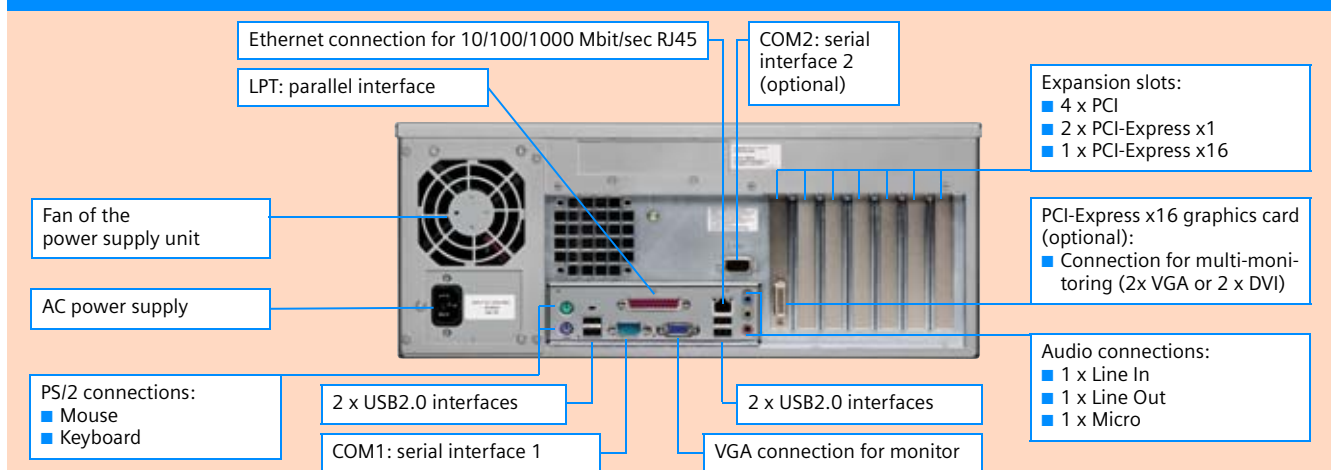
#### Further options for an increased system availability:

- An optional RAID1 mirror disk system and the hot-swap removable frame, which allows for hard disk replacement during operation. The RAID controller is already onboard and does not occupy a PCI slot;
- Diagnosis/signaling software SIMATIC PC DiagMonitor for the early diagnosis of, e.g., internal device temperature, fan and program execution (watchdog) as well as of the hard disks - local or remote, via LAN or web server. Communication via OPC and SNMP directly in the application and the fast response to events reduce costs through the minimization of downtimes.

### Long-term availability and investment protection for reduced engineering expenditures

- Long-term available platform with active marketing for at least 1.5 years and a subsequent guaranteed spare parts availability of at least 3 years
- The SIMATIC Rack PC 547B is an integral component of Totally Integrated Automation (TIA). It is system-tested with SIMATIC hardware and software components such as SIMATIC WinCC / WinCC flexible, software PLC WinAC or the communication processor CP 5611 for PROFIBUS DP, thus reducing integration and evaluation expenditures.
- Certifications and approvals for the global marketing (cULus) and for application in industrial and residential buildings (CE)
- Support of legacy interfaces (PS/2, COM, LPT)
- Installation-, interface- and software-compatible with previous model Rack PC IL 43
- Global service and support

### Rear side design



Subject to technical changes/improvements

# SIMATIC Rack PC 547B

## Technical Data



SIMATIC Rack PC 547B	
Design	19" rack, 4 U, outside lacquered <ul style="list-style-type: none"> <li>• prepared for telescopic rails</li> <li>• for horizontal and vertical installation</li> <li>• 19" mounting bracket removable from the outside</li> </ul>
Processor	<ul style="list-style-type: none"> <li>• Intel® Core™2 Duo E6600 (2.4 GHz, 1066 MHz FSB, 4 MB second-level cache, EM64T)</li> <li>• Intel® Core™2 Duo E4300 (1.8 GHz, 800 MHz FSB, 2 MB second-level cache, EM64T)</li> <li>• Intel® Celeron® 440 (2.0 GHz, 800 MHz FSB, 512 KB second-level cache)</li> </ul>
Main memory	• ≥ 512 Mbyte DDR2 667 SDRAM (with dual-channel support); equippable up to 4 Gbyte
Free slots for expansions	• 4x PCI, 1x PCI-Express x16, 2x PCI-Express x1 (all long)
Graphics	<ul style="list-style-type: none"> <li>• Onboard: Intel GMA950 controller on PCI-Express bus, integrated in chip set, up to 224 Mbyte, 1280 x 1024 pixels at 100Hz refresh rate and 32 bit colors</li> <li>• In PCIe x 16 slot (optional): PCI-Express graphics card (dual head: 2x VGA or 2x DVI), 128 Mbyte, up to 2048 x 1536 pixels with 75 Hz refresh rate and 32 bit colors</li> </ul>
Operating system <ul style="list-style-type: none"> <li>• pre-installed and enclosed on restore DVD</li> </ul>	<ul style="list-style-type: none"> <li>• without</li> <li>• Windows 2000 / XP Professional MUI (multi-language user interface; 5 languages, Ger/En/Fr/Sp/It)</li> <li>• Windows server 2003 incl. 5 client MUI (multi-language user interface; 5 languages, Ger/En/Fr/Sp/It)</li> </ul>
Power supply	AC: 110/230 V, 50/60 Hz; short-time voltage interruption max. 16 msec with 0.85 x nominal voltage
Drives	
Hard disks (serial ATA with NCQ technology)	Installation internal or in front drive holder in removable frame <ul style="list-style-type: none"> <li>• 250 Gbyte, or</li> <li>• 2 x 250 Gbyte, or</li> <li>• RAID1, 2 x 250 Gbyte (RAID controller onboard), hot-swap in removable frame</li> </ul>
Optical drives	• DVD-ROM or DVD±R/RW
Floppy drive	1.44 Mbyte (optional)
Slots	6 (internal; 2 x 3.5", front: 3 x 5.25", 1 x 3.5")
Interfaces	
Ethernet	1 x 10/100/1000 Mbit/sec (RJ 45)
USB 2.0 (high-current)	4 x rear, 2 x front
Serial/parallel	COM1 (V.24), COM2 (V.24) optional / LPT1 (EPP/ECP)
VGA/DVI	1 x VGA, 2 x VGA or 2 x DVI via PCIe x 16 graphics card (optional)
Keyboard/mouse	2 x PS/2
Audio	1 x line in; 1 x line out, 1 x micro
Ambient conditions	
Degree of protection in acc. with EN 60529 / protection class	IP30 front, IP20 rear / protection class I in acc. with IEC 61140
Vibration during operation <sup>1)</sup>	20 to 58 Hz: 0.015 mm; 58 to 200 Hz: 2 m/sec <sup>2</sup> (approx. 0.2 g) in acc. with IEC 60068-2-6
Shock during operation <sup>1)</sup>	9.8 m/sec <sup>2</sup> , 20 msec (approx. 1 g) in acc. with IEC 60068-2-27
Ambient temperature during operation	5 ... 40 °C, with full processor power (without power loss, throttling)
Humidity	5 ... 80% at 25 °C (no condensation)
System-tested SIMATIC industrial software <sup>2)</sup>	
SIMATIC industrial software	STEP 7®, WinAC®, WinCC® flexible, WinCC®, SOFTNET®
Certifications/directives	
Safety standards	EN 60950, UL 60950, CSA C22.2
Certifications	cULus (UL 60950)
CE mark	Application in industry and offices
EU directives	WEEE / RoHS
Dimensions and weights	
Installation dimensions (W X H x D in mm)	434 x 177 x 446
Weight	approx. 19 kg

1) Restrictions during operation of optical drives and removable frames

2) Subject to the permissible system configuration

Subject to technical changes/improvements