

Investment security through the use of long-term available Industrial PCs while utilizing the continuous PC innovations and performance advancements at the same time

Simple communication through low-cost, integrated network interfaces

Reduced training effort through Engineering in the familiar SIMATIC STEP 7 environment

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Layout and function

Engineering

SIMATIC STEP 7 is the one engineering software for all, the modular SIMATIC controllers S7-300/S7-400 and the software controller WinAC.

Platforms

SIMATIC WinAC RTX runs on standard PCs with MS Windows XP and embedded operating systems and is optimally matched to SIMATIC industrial PCs. Use on embedded PC platforms, such as the SIMATIC IPC 427C or the SIMATIC HMI IPC 477C, results in especially affordable and extremely robust solutions. SIMATIC WinAC RTX uses the main memory of the PCs and offers program backup on the hard disk/flash drive. Non-cyclic data, such as production parameters or recipe data, can be stored permanently on the memory of the PC with the help of system functions. In addition, all data can be held retentively in conjunction with an uninterruptible power supply (UPS).

Connection of the I/O

SIMATIC WinAC RTX can control the distributed I/O not only via PROFIBUS, but also via PROFINET. The I/O is connected via PROFIBUS DP at up to 12 Mbit/s via the integral DP interface of the SIMATIC IPCs or via communication processors (CP 5611 A2/5613 A2).

You can operate up to four PROFIBUS lines with up to 500 slaves. In addition it is possible to connect the I/O via PROFINET. This requires either the integrated Ethernet interface of the SIMATIC IPC or a communication processor CP 1616 (PCI) or CP 1604 (PCI-104).

Furthermore WinAC RTX also supports the system function isochronous mode.

With isochronous mode, high-speed, time-dependent applications such as closed-loop controls can also be implemented with distributed I/O.

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Technical data

WinAC RTX 2009	
Order No. group:	6ES7 671-0RC.
Basic features	
RAM (integral) (code/data)	PC memory (non-paged memory)
Number of inputs/outputs in total	16/16 KB
Bit memory	16 KB
S7 counters/timers	2048/2048
Number of blocks (FB, FC, DB)	Limited only by available PC work memory
PLC programming software	STEP 7, V5.4 SP4 or higher, Engineering Tools (optional)
Retentivity	
with UPS	All data ¹⁾
Instruction execution times	
Bit / integer operation	0.004 µs/0.003 µs
Floating-point operation (reference platform)	0.004 µs (Pentium 4, 2.4 GHz)
Deterministic	•
DP connections	
Total	4
CP5613-A2 / 5603	4
CP5611/integrated interface of SIMATIC PCs, max.	1
PN interface	
CP1616/1604	1
PROFINET interface	1 (either SIMATIC PC or Microbox)
Communication functions	
PG/OP communication	•
S7 communication	•
Open User Communication (OUC)	•
Process data access via OPC	•

Technology

Isochronous mode	• (PN and DP)
SIMATIC FM	FM 350/351/352/ 353/354/355
Easy Motion Control	•
C/C++, VB, C# link	• With ODK

Operator control and monitoring via SIMATIC interface

SIMATIC WinCC/WinCC flexible

•

Operating system

Windows XP Professional	• (SP2, SP3)
Windows XP Embedded	• (on XPe images of the SIMATIC PC)
Windows 7	•

1) 128 KB with specific SIMATIC PC without UPS

Take a look on the technical datas on the right to compare SIMATIC WinAC RTX with WinAC RTX



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More information



Brochure Overview: "SIMATIC Controller – The innovative solution for all automation tasks"

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Overview of topics

- > Case Studies
- > Technical Documentation WinAC
- > Specification Texts PC-based

Security information

To ensure the secure operation of a plant or machine it is also necessary to take suitable preventive action (e.g. cell protection concept) and to integrate the automation and drive components into a state-of-the-art holistic industrial security concept for the entire plant or machine. Any third-party products that may be in use must also be taken into account. Please find further information at: > <http://www.siemens.com/industrialsecurity>

