

PROFINET onboard ...

... for more networking options



SIMATIC PC

Answers for industry.

SIEMENS

More networking options – SIMATIC PCs with PROFINET onboard

With their onboard interface for PROFINET, the new SIMATIC PCs offer even more networking options. PROFINET, the open and vendor-independent standard based on Industrial Ethernet, gives you direct access from the corporate management level right down to the field level.

One solution for all requirements

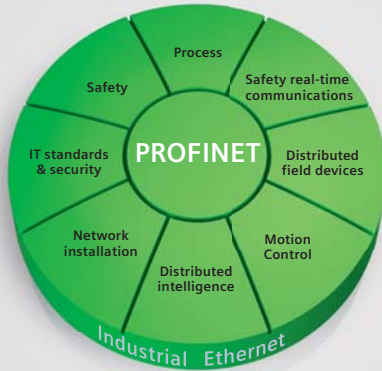
Industrial systems, real-time capability, integration into distributed field devices, isochronous Motion Control applications, simple network administration and diagnostics, protection against unauthorized access, efficient, cross-vendor engineering, and high machine and plant availability: PROFINET meets all these requirements.

Real-time communications:

Real Time (RT) and Isochronous Real Time (IRT)

PROFINET meets all the real-time requirements of automation engineering and is used for time-critical process data – typical examples include cyclic user data or event-driven alarm incidents. PROFINET differentiates between Real Time (RT) and Isochronous Real Time (IRT). IRT provides hardware-supported, isochronous real-time communications based on a reserved band width concept, thus enabling a cycle time of up to 250 μ s with a jitter of 1 μ s.

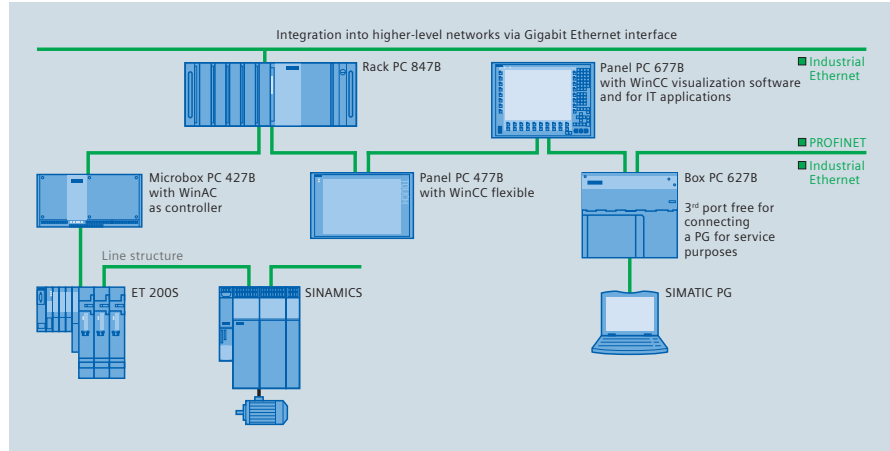




PROFINET is the solution for all requirements

Maximum system performance

- Intelligent controller architecture (based on ERTEC 400) reduces the load on the processor and increases overall system performance
- High-speed real-time communications in automation networks
- Real time PROFINET and IT communications (e.g. TCP/IP) are possible simultaneously on one line – without degrading the real-time functionality



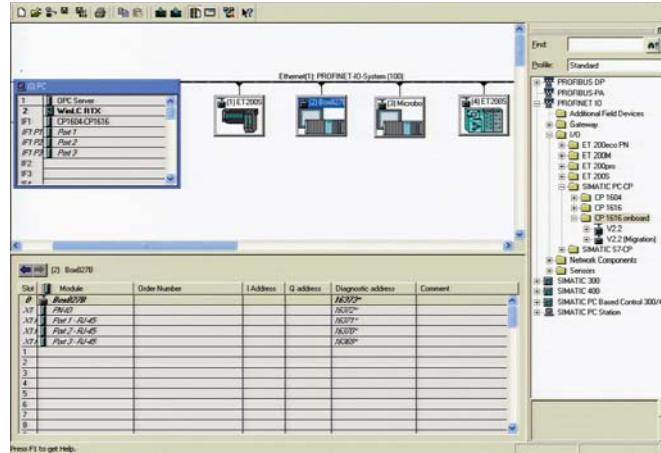
The SIMATIC PCs can easily be integrated into PROFINET networks via the PROFINET interface with an integral 3-port switch

More flexibility and compactness

- Simple establishment of linear bus and tree topologies thanks to an integral 3-port switch
- Use as additional standard Windows interface – e.g. for TCP/IP communications or visualization applications with WinCC flexible (in the case of RT operation)
- Direct connection of distributed I/O and drives – e.g. with WinAC RTX as the controller
- Additional slot available because the interface is integrated on the mainboard
- The compactness of the Microbox 427B and Panel PC 477B is retained since an expansion rack is not required
- No hardware installation required



Integral 3-port switch for flexible installation of linear bus and tree topologies



Easy configuration of the network topology in STEP 7 or NCM-PC



Efficient self-diagnostics: SIMATIC Rack PC 847B with PROFINET LED for group faults

System-tested with SIMATIC hardware and software

- Full support in the software PLC WinAC RTX 2008
- Full support in STEP 7 and NCM-PC for configuring the network
- Compatibility of the user software between the onboard interface and the CP 1616/CP 1604

High system availability and user friendliness

- Support for commissioning and diagnostics thanks to indication of group faults via the PROFINET LED on the front
- Enhanced ruggedness because no connector is required for a PC card
- Industrial connections:
 - High level of electromagnetic compatibility
 - High level of ruggedness thanks to cable grip
 - FastConnect for simple and fast on-site assembly of the cable



SIMATIC PCs with PROFINET onboard are available in the following designs:
Box PC, Rack PC and Panel PC

SIMATIC PCs and PROFINET onboard **Your benefits at a glance:**

- More space for other PC cards thanks to an integrated interface
- Increased performance of the overall system thanks to an intelligent controller architecture
- Shorter response times thanks to IRT-capable PROFINET with bandwidth reservation
- Real-time PROFINET and IT communications simultaneously on one line
- Simple installation of linear bus and tree topologies thanks to the integrated 3-port switch
- The onboard interface can be used as an additional standard Windows interface
- Full support of the software PLC WinAC RTX 2008
- Integrated into PROFINET configuration (STEP 7 and NCM-PC)

SIMATIC PCs – more industrial PCs

Find out more about SIMATIC PCs at:
www.siemens.com/simatic-pc

Find out more about PROFINET at:
www.siemens.com/profinet

The optimum configuration for your application:
www.siemens.com/ipc-konfigurator

Place orders electronically on the Internet through the A&D Mall:
www.siemens.com/automation/mall

You can find your local Siemens contact person at:
www.siemens.com/automation/partner







SIMATIC PCs with PROFINET onboard

Our SIMATIC PCs with PROFINET onboard are available in different designs and with different functionalities. These include:

- Rack PC – flexible and powerful in 19" format
- Box PC – compact and rugged for universal use
- Panel PC – rugged and powerful with high-contrast displays

SIMATIC PCs – more industrial PCs

SIMATIC PCs are reliable industrial PCs, developed and produced by Siemens. They offer a high degree of ruggedness and industrial suitability thanks to rugged enclosures, in-house development of mainboards, and high-quality components like industrial displays. Our aim is to provide users with products that are innovative and, at the same time, available over the long term. SIMATIC PCs offer you availability of 3 to 5 years, including at least 6 months overlap with any new generation of devices, as well as 5 years repair and spare parts availability.

	Rack PC	Box PC	Panel PC	
8xx series High Industrial Maximum expandability Rugged High performance	 Rack PC 847B	 Box PC 827B		Same mainboard basis with Intel Core 2 Duo
6xx series High Industrial Compact Rugged High performance		 Box PC 627B	 Panel PC 677B	
4xx series Embedded Ultra compact Highly rugged Maintenance-free		 Microbox PC 427B	 Panel PC 477B	Same mainboard basis with Intel Pentium M

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