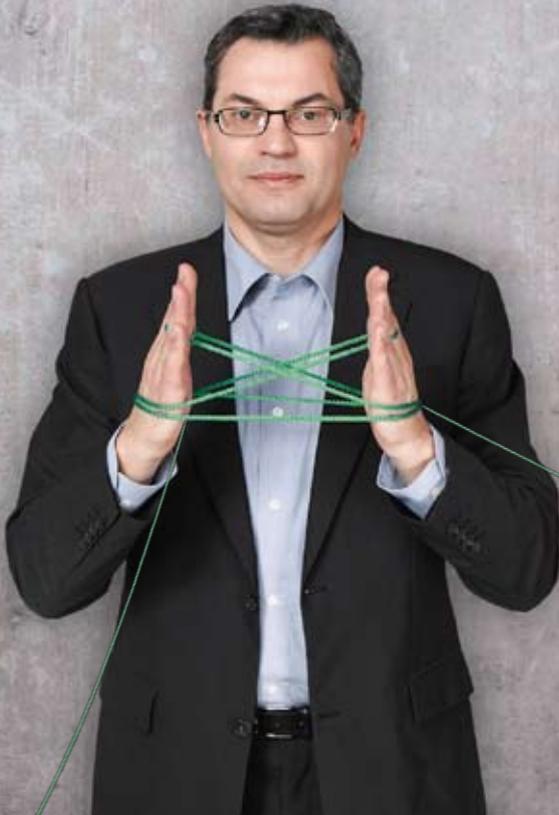


**PROFINET –
networking the world with the leading
Industrial Ethernet standard**

PROFINET is open ...



“The open and constructive cooperation in the different PI working groups provides the basis for the best standard. Every supplier can use it to develop outstanding products for their customers.”

Xaver Schmidt,
Siemens AG, Senior System Manager PROFINET
PI, Head of PROFINET Marketing

The international markets are full of opportunities for enterprises. However, they also pose great challenges. Customers expect fast product changes and future-proof automation technology. High production speed, as well as outstanding product quality, is taken for granted.

Experts of various firms convert these requirements into PROFINET specifications in close cooperation with their customers. Leading technology suppliers create individual firmware or hardware packages from that, which enables manufacturers to make use of technologies that suit their requirements in order to provide new products and functions easily.

PROFINET devices can improve field bus properties, such as data exchange, and they can also integrate innovative possibilities such as Web access. Competitive systems and machinery are the result of first-class device selection combined with innovative PROFINET functions.



... versatile ...

Safety

PROFIsafe is the worldwide standard for failsafe communication. This is how safe applications can be inexpensively created in combination with PROFINET. Standard communication and safety-related communication are both covered by a single cable, which significantly reduces wiring and engineering effort.

Diagnostics

During commissioning, maintenance, or in the case of a fault, it is necessary to gain an overview of the state of the system or machinery within the shortest possible time. The consistent diagnostics of PROFINET makes it possible to retrieve system and machinery information in a quick and precise manner – even without any engineering tool. This ensures high availability at all times.

Performance

PROFINET uniquely combines the highest performance with the highest degree of openness. PROFINET satisfies all requirements with cycle times of up to 31,25µs. In parallel, PROFINET allows unrestricted transfer of standard data. PROFINET thus provides the necessary performance to meet even future application requirements flawlessly and increase productivity.

Security

In an increasingly networked automation environment the importance of security is growing more and more. Suitable measures must be taken to protect machinery and systems. PI is making an important contribution, by having devices undergo rigorous security testing during the certification process, for example.

Wireless

Conventional solutions for the integration of mobile equipment often entail wear and high costs. With PROFINET, contact lines and trailing cables have become a thing of the past. The seamless integration of Industrial WLAN makes mobile real-time communication possible, even for failsafe applications, and paves the way for new concepts.

Energy management

PI has been the first organisation to create a profile for energy management: PROFenergy. Along with energy data acquisition, PROFenergy stands out by the possibility to easily shut down machinery and system parts during pauses in a controlled manner. This allows energy savings of up to 60 per cent.



... and safe.

"The international network and the experience of PI are unique. They provide our member companies with a significant competitive edge."

Jörg Freitag
PI and PNO chairman



With a presence on every continent, PROFIBUS & PROFINET International (PI) is the world's most influential interest group in the field of industrial communication. 27 Regional PI Associations (RPAs), 43 Competence Center, 23 Training Center, 10 Test Labs, and more than 1,400 member companies speak volumes.

For more than 20 years, PI has been the neutral platform on which all the relevant automation manufacturers from all over the world meet and define common technologies such as PROFINET with an outstanding degree of team spirit. Every one is invited to contribute ideas, propose changes, and intervene – what counts is the aim of the PI family: to support users with the best solutions at all times.



PROFINET – the leading Industrial Ethernet standard

Most products

PROFINET is the standard for innovative automation products. More than 600 devices are already available with an integrated PROFINET interface, and the number keeps growing. For the users, this translates into a large choice of products for their applications, and the assurance of relying on an open, future-proof standard.

Most manufacturers

PROFINET has had an excellent reputation with the world's leading industrial companies for many years. Today, no other Industrial Ethernet standard is supported by a similar number of manufacturers. More than 150 manufacturers already rely on the unparalleled versatility of PROFINET for their devices.

Most future

The long-term perspective is what matters – especially when it comes to choosing the standard for industrial communication. A decision for PROFINET is a decision for the future. The large number of manufacturers and products behind PROFINET ensure the long-term security of investments. The soaring number of installed field devices illustrates that PROFINET is the Industrial Ethernet standard of the future. The number of PROFINET devices in operation is expected to multiply to more than 10 million by 2014.

