



Independent Open Integration

Optimal digitalization in the field – with HIMax and HIMatrix.

Seamless integration into any automation environment is one of the major product benefits of HIMA systems. With the widely accepted communication standards PROFINET (PN) and PROFIsafe (PS), HIMA is expanding their range of protocol options – all PROFINET devices on the market can now be used. Safe digital field devices can be integrated using the open PROFIsafe protocol.

In addition to data accuracy, digital communication also enables the exchange of relevant information – safeguarded through end-to-end SIL3 quality. Simply make your selection of the best-of-breed devices that are most suited to your individual application.

Benefits

- **Simple:** PROFINET runs on COM modules of the HIMA systems
- **Consistent:** Identical configuration of HIMax and HIMatrix with PN/PS (PS connections: HIMax = 1024 / HIMatrix = 512)
- **Safe:** PROFIsafe is processed in the SIL3 CPU and, using the black-channel principle, is suitable for applications up to SIL3
- **Secure:** All measures, such as "Defence in Depth," can also be used in PN networks.
- **Scalable:** PROFINET networks (as well as Ethernet networks in general) are suitable for any project size.
- **Flexible:** Reliable planning in every life-cycle phase – in part due to simple options for rededicating devices
- **Robust:** Ethernet has sustainably proven its reliability in the industrial environment
- **Well-known:** : PROFINET is a standardized industrial communication that is trained worldwide
- **Digital:** Higher profitability through precise process values and meaningful diagnostic information
- **Centrally viewable:** Unaltered forwarding of data from the field to the enterprise level. Visualization, (predictive) maintenance, optimization, as well as big-data analysis and asset management are made more efficient.

PROFINET and PROFIsafe are available for HIMax and HIMatrix.



Certified compatibility, future-proof and innovative in a powerful community.



The high degree of **flexibility** offered by PROFINET and PROFIsafe applications provides tailored benefits in the development of the respective solution.

An application example:

The feature **“shared device”** for instance enables concurrent access to a field device by one controller and one HIMax – which facilitates applications such as a servo drive being controlled by a controller, but stopped by a HIMA system in an emergency.

A wide variety of transmission paths for flexible use:

“Wireless” can be employed, for example, to provide integration of sites that are difficult to access, while using Ethernet- APL allows realization of robust and efficient integration into the field level– even in potentially explosive atmospheres.

HIMA offers **training and consulting** services so that you can exploit the full range of benefits offered by PROFINET and PROFIsafe for your individual application.

As a leading supplier of safety-related systems in the process and rail industries, with PROFINET / PROFIsafe, HIMA is setting yet another milestone to facilitate Independent Open Integration – and to empower you to implement the best possible individual solution.

Variants Supported:

PROFINET Controller V2.4MU1
 Conformance Class B RT_Class_1

PROFIsafe Host V2.6MU1

For integration, HIMA works together with their partner, SOFTING. This means that PN/PS innovations are always available in their most current form.

Technical Data:

PN stations: 128 per COM.

Up to 20 COMs per HIMax/1 COM per HIMatrix.

PS stations: HIMax=1024 / HIMatrix=512

Speed: 100 Mbit

Update cycle: Depending on the number of stations and the data volume

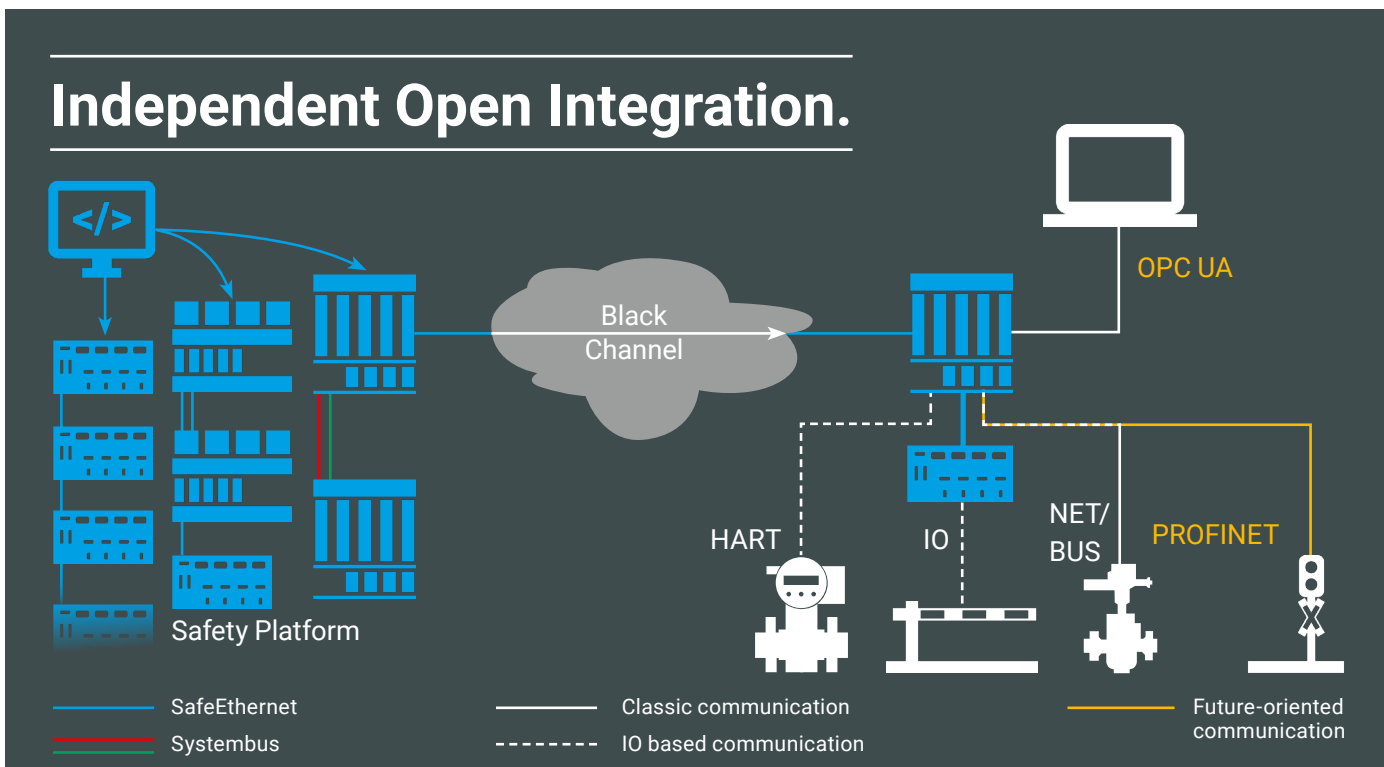
Connection: 2 * RJ45 switch

Configuration: Fully and clearly implemented in SILworX

Ring redundancy: With external MRP master

iPar Server: Not integrated

Restriction: In contrast to SafeEthernet, PROFINET cannot be routed.



Reference number: 1000000001307
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HIMA offers numerous options for integration into the field level. In addition to IOs and HART as well as other common bus systems and networks, PROFINET/PROFIsafe can now also be employed. The transfer of data to higher levels is implemented via OPC UA.