

Optimizing substation automation with Process Bus

Process Bus solutions for protection relays

Compliant to the latest standards IEC 61869 and IEC 61850-9.2 LE, designed for proven digital substations



Process Bus is a critical cornerstone for digital substations and is a future ready solution for network automation. It provides opportunities to improve the overall cost of designing, installing and testing of protection and control systems.

Customer can benefit from improved working condition enabled by process bus, converting analog signals to digital signals and transmit on a fast and redundant fiber optic network with the support of a Stand Alone Merging Unit (SAMU).

Product at a glance:

Easergy MiCOM Px40 series with Process Bus offers a stable solution compliant to latest standards of IEC 61869 and IEC 61850 9-2 LE including PRP redundancy and advanced cyber security.

Easergy MiCOM Px40 applications available with Process Bus (RJ45 and fiber optic) are:

- Feeder protection,
- Line differential protection,
- Distance protection,
- Busbar protection,
- Transformer protection.

The cornerstone for digital substations

Process bus implementation results in suitable working conditions along with information exchange between primary equipment and control centers using cybersecurity standards. Such products offer interoperability with other manufacturers to make systems more flexible and user friendly.

Cost reduction

- Save up to 40% on protection and control installations.
- Reduce wiring and engineering upto 70%.
- Less raw materials with Ethernet cables.

Interoperability in multi-vendor systems

- Thanks to full compliance with latest standards IEC 61869.

Optimized and improved availability

- Ethernet standardization brings redundancy of the communication channel so that you are not without mission critical process bus data when combined with PRP (Parallel Redundancy Protocol).

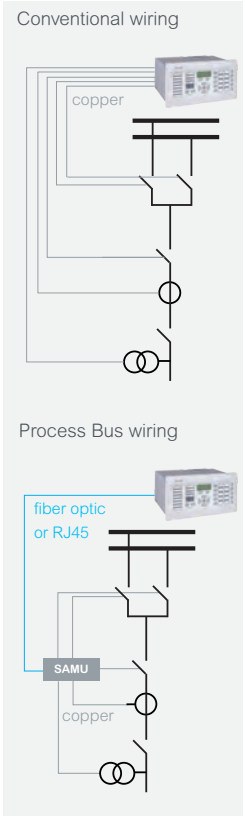
Improve working conditions of your personnel

- Replacing analog with digital sampled values, with the inherent isolation from the primary circuit removes dangerous voltages and currents from the protection cubicle.
- Easier maintenance or replacement where connection of signals can be done under appropriate working conditions.

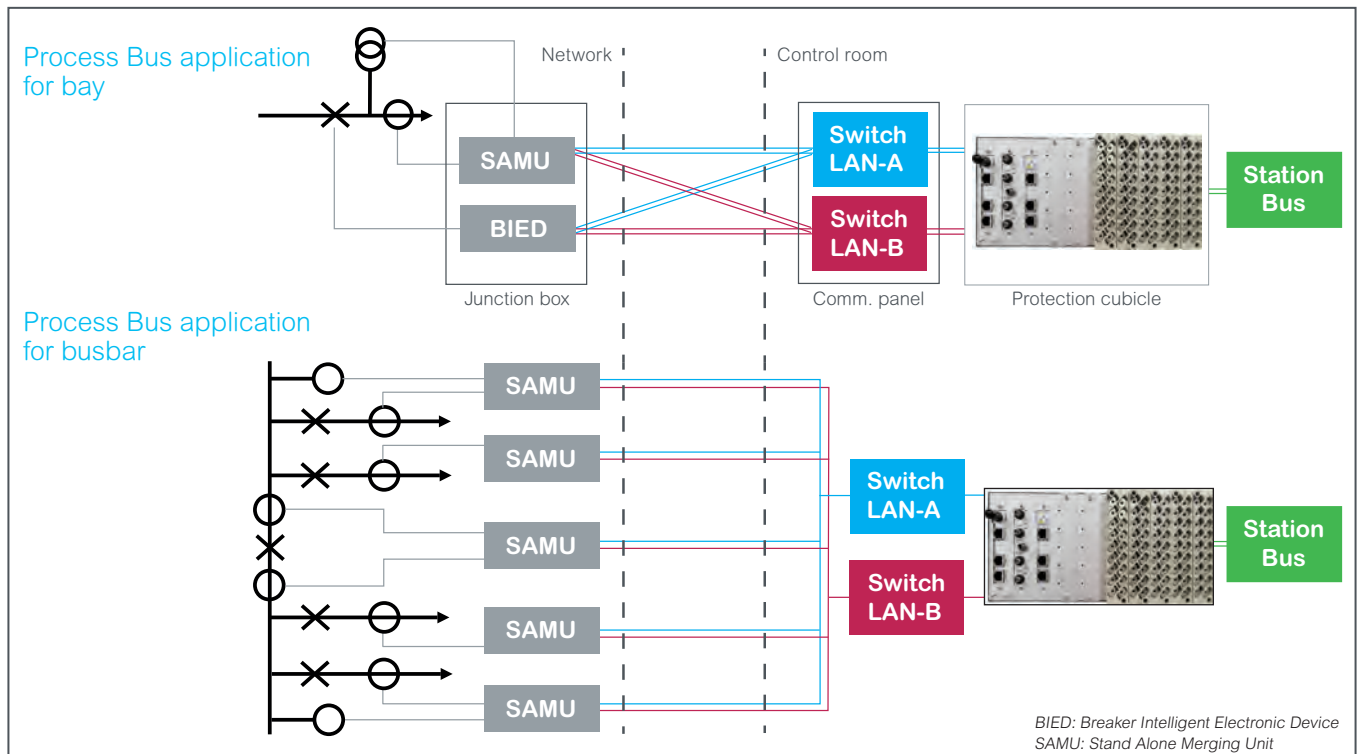
Advanced cyber security

- With features like Role-Based Access Control (RBAC), data's protection is compliant to international standards.

Wiring:



Typical applications



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