

Fieldbus installations made easy

Servicing the whole range of PROFIBUS and FOUNDATION™ fieldbus applications



Utilizing the latest generation of field devices and latest fieldbus technologies effectively is impossible without some comprehensive know-how.

ABB is your partner for longstanding expertise in network fieldbus technology and distributed intelligence among field devices.

In addition to the whole range of field devices and network components available with both PROFIBUS DP/PA and FOUNDATION™ Fieldbus H1 technology, ABB also offers the whole range of fieldbus services.

- Consulting and training
- Planning and design
- Commissioning
- Life cycle support

Qualified planning and design of fieldbus applications

Having the right information at the right place at the right time is vital in maximizing the efficiency of your processes and optimizing your plant operations. Not only does it boost the data volume you can handle; it also accelerates your decision-making processes.

To make it all happen, though, you need cutting-edge fieldbus technology as well as “smart” field devices. Both facilitate, among others, your projection of maintenance costs, helping to reduce the life cycle costs of your applications.

Fieldbus know-how

Our specialists are trained and certified by fieldbus organizations to ensure the permanent exchange of knowledge between you and ABB. Add to that our longstanding experience and use of standardized engineering tools as further guarantors for the efficient and qualified planning of your fieldbus application.

Systematic approach to planning

In their planning and design, fieldbus systems stand out from measuring devices due to certain criteria relating to 4...20 mA technology. The higher we maintain accuracy in basic engineering, the lower the risk we run of a “rude awakening” during initial operation.

Choosing the optimal fieldbus technology

The first step is to engage in close dialog with you and your plant engineers to help you choose the kind of fieldbus technology that works best for you. Our program includes presentations and seminars introducing you to all the possibilities of the various technologies, such as:

- PROFIBUS DP remote IOs featuring HART field devices
- PROFIBUS DP & PA
- FOUNDATION™ Fieldbus-H1

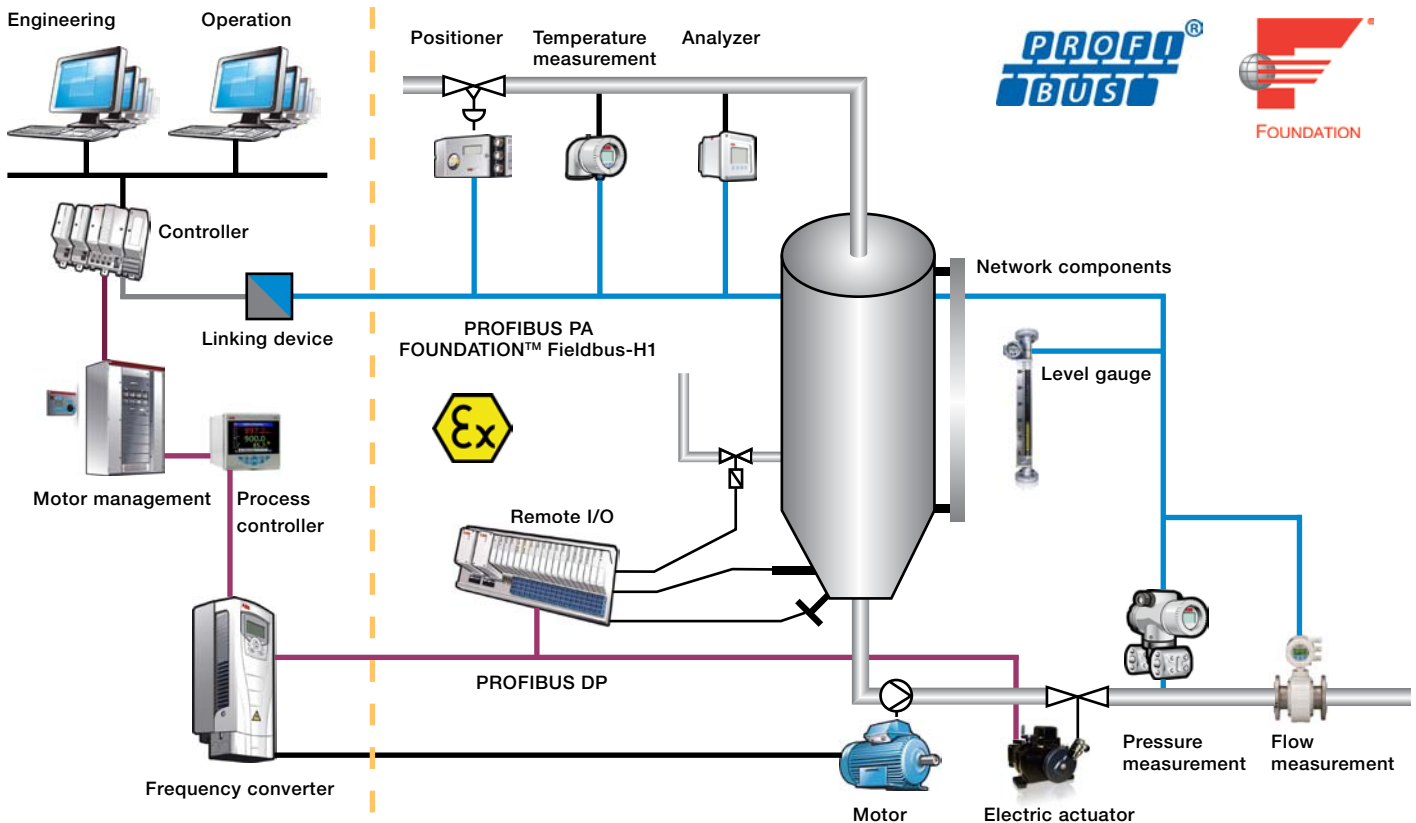
Engineering bus topology

Once you’ve chosen the field bus concept that’s best for you, the next step is to develop your bus topology. This involves grouping all field devices located throughout your plant into individually effective bus segments with a maximum number of field devices for each. In each segment, determining the maximum number of field devices depends on the cable length, required cycle time, selected transfer rate, and on the function blocks of the individual devices.

In addition, we compile your current balance and assist you in obtaining proof of intrinsic safety (FISCO - Fieldbus Intrinsically Safe Concept) for your hazardous plants.

The final step comprises your choice of suitable network components, based on your environmental conditions and installation overhead. ABB offers a comprehensive product range of network components.

Example of fieldbus topology





Basic services

Consulting, training, planning and design

- Conceptual consulting
- Planning personnel training and consulting
- Engineering fieldbus topology
- Structuring fieldbus segments
- Calculating number of field devices per segment
 - Current balances
 - Cycle times
 - Cable lengths
 - FISCO consideration
- Allocating addresses
- Bus and network components
 - Selection and supply

Documentation

- Layout plans
- Calculation tables
- Bills of materials
- FISCO certification
- Project-specific documentation

On-site services

You can count on the on-site service of our engineers during commissioning of your fieldbus systems for the flawless start-up of your production processes.

- Commissioning of bus segments
- Support for commissioning of complete systems
- Field service
- Training for plant personnel

We're here to help you implement new systems or retrofit existing ones in hazardous (Ex) and non-hazardous areas, regardless whether they involve ABB field devices or others.

You can further count on the compliance of our specialists with applicable standards and guidelines, such as IEC ISO, DIN, ATEX, FISCO, NAMUR and FDA, during the commissioning and evaluation of your system. Last but not least, you can count on the top quality of our specialists' completed work and our analyses of fieldbus protocols to ensure stable plant operations throughout your production cycle.

In a nutshell, count on ABB to reduce commissioning time and your life cycle costs.



Life cycle support Covering the entire lifetime of your instrumentation

Preventive maintenance

Customer-specific maintenance agreements are basically tailored to the installed equipment.

- Increased plant efficiency and availability
- Process optimization
- Reduced maintenance costs
- Spare parts management

Maintenance

Regular maintenance goes a long way in maximizing the availability of your instrumentation. Especially if it comes from our specialists, who combine top know-how with the latest diagnostic tools.

- On-site calibrations
- Performance checks

Consulting

Rely on our experienced staff to keep your plant operating in an optimal state. Their in-depth process knowledge guarantees cost-effectiveness at its best.

- Plant optimization
- Maintenance concept
- Asset management
- Life cycle management
- Explosion protection
- Safety, environmental protection

Migration and updates

With our update and migration services, you're always in step with the latest standards of technology. We offer migration planning fine-tuned to your specific requests regarding hardware, software and firmware.

Spare parts and repair service

Our global logistic network for spare parts doesn't only ensure speedy and reliable delivery service. It also ensures flexible repair service in certified workshops geared to producing cost-effective solutions.

- Comprehensive spare part inventory
- Service warranty completion
- Update & upgrade services
- Workshop services
- Replacement devices

Express delivery

To help keep system interruptions or downtime to a minimum, we ship a variety of selected products within 24 hours.

For more information, please contact:

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max. 42 euro cents/minute from mobile phone service

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