Level | Pressure | Flow | Temperature | Liquid Analysis | Registration | Systems Components | Services | Solutions

PROFIBUS – Training Brochure 1

Courses in 2010

- Certified PROFIBUS PA Engineer
- Customized Technology

Endress+Hauser

People for Process Automation

Course objectives

The advantages of Fieldbus technology are being recognized rapidly throughout the world of Process Automation. As a result, clients are increasingly asking for a different approach to planning, designing and implementing their new plants and extensions. The success of such projects depends on an integral approach to those new solutions and demands a solid base of knowledge and experience.

Training courses are designed to provide the participants with the tools needed to plan, commission, maintain and troubleshoot, depending upon which course and level are selected. Within the goals of the customized course, each is fine-tuned to meet the experience and needs of the individual participating group. Emphasis is placed on gaining as much practical experience as the course can offer.

Prerequisites:
Basic knowledge in computers, electronics and mathematics.

Course duration Certified PROFIBUS PA Engineer:
Three days theoretical and practical work, and one day examination.

Target audience:
System programmers, control and instrumentation engineers, engineers who plan PROFIBUS facilities as well as service engineers/installers.

Venue:
Endress+Hauser Process Solutions AG,
PROFIBUS International Competence and Training Center,
Kägenstrasse 2,
4153 Reinach,
Switzerland

Also at our Training Hubs in Singapore, Canada, Shanghai, Kuala Lumpur.

Fee Certified PROFIBUS PA Engineer:
Please contact your local Endress+Hauser Sales Center.

Contact and registration:
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Course content

Theory I:
- PROFIBUS organization and structure
- From 4…20mA to fieldbus
- PROFIBUS DP/PA Physical Layer
- DP/PA PROFIBUS characteristics
- DP/PA Links and Couplers
- Network components DP/PA
- Installation DP/PA
- Commissioning
- PA segment calculation
- Device Integration
- Diagnosis and status
- DPV0 / DPV1
- Address handling

Theory II:
- Token handling
- Cyclic and Acyclic communication
- Termination
- FISCO / Ex. concepts
- Network components
- Device management
- GSD, EDD, FDT/DTM
- PA profiles 3.0x
- Cycle time calculation
- Important bus parameters
- PROFIBUS DP protocol
- and more…

The following tools and systems are used during the course:
- FieldCare (FDT/DTM)
- OPC Server/Client
- ProfiTrace bus analyzer
- P+F Advanced Diagnostic Tool and others
- Oscilloscope
- Different configuration software tools from SIEMENS, ABB, ControlCare, etc.

Practice:
- Wiring of a DP/PA bus segment
- Commissioning with acyclic tools
- Cyclic communication, data handling
- Device integration (ABB, Siemens, Rockwell etc.)
- Signal measurement and evaluation with oscilloscope
- Current and voltage measurement
- Handling with ProfiTrace bus analyzer
- Commissioning of demo plant
- Device replacement
- Troubleshooting

Dates 2010

Certified PROFIBUS PA Engineer 2010

Feb. 2nd – 5th / Reinach	(German)
April 27th – 30th / Reinach	(German)
June 8th – 11th / Reinach	(English)
September 14th – 17th / Reinach	(German)

For dates in Singapore, Canada, Shanghai and Kuala Lumpur, please contact the local Endress+Hauser sales center.

Refresh training:
Keep your knowledge up to date and join the course without final exam.
(Only for Certified PROFIBUS PA Engineers)

Customized classes ...
can also be arranged on request.

Certified PROFIBUS PA Engineer
Upon successfully passing the final examination (min. 70% of the max.number of points), the participant will receive a world-wide recognized certificate and the right to use the title "Certified PROFIBUS PA Engineer". All successful participants will be listed on the official PROFIBUS International homepage.

Final examination comprises:
- Multiple choice questions
- Segment calculation
- Practical work

PROFIBUS International Competence and Training Center, Reinach

12.06/I.I.

PC Process Solutions

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