# Foundation Fieldbus Process Control 1 Learning System T5552-FF1 T5552-FF1A





Foundation Fieldbus to ISO OSI Model Relationship

## **Learning Topics:**

8

7

6

5

4

3

2

Layer Index

- Foundation Fieldbus Technology
- Operation of a Fieldbus DCS
- Communication Protocols
- Fieldbus Components
- Foundation Fieldbus Wiring and Connections
- Fieldbus Power Supply
- Fieldbus Segment Cabling
- Device Configuration
- Configuring a Fieldbus Device
- Field Device Calibration and Operation
- Fieldbus Diagnostic and Maintenance Capability

Amatrol's Foundation Fieldbus Process Control 1 Learning System covers a popular industrial method for calibrating and troubleshooting valves and transmitters connected to a network. Foundation Fieldbus is an all-digital, multi-drop communication system used for basic and advanced flow control, temperature control, and tank level control utilized primarily in places like oil refineries, chemical plants, and paper mills. Specifically, this learning system covers major Foundation Fieldbus topics including an overview of Foundation Fieldbus technology, H1 Foundation Fieldbus wiring and connections, device configuration, and field device calibration and operation.

The T5552-FF1 teaches highly-effective communication protocol and connects to the Level/Flow Process Control Learning System (T5552A) and the Portable PLC Learning System (990-PAB53), which utilizes the Allen-Bradley CompactLogix L32 processor. The T5552-FF1A connects to the Portable PLC Learning System (990-PAB53A), which utilizes the Allen-Bradley CompactLogix L16 processor. Learners will also use Amatrol's world-class, highly interactive multimedia to gain insight into the theoretical aspects of Foundation Fieldbus and

to follow along with step-by-step explanations of handson skills, such as identifying the components of a Foundation Fieldbus segment and configuring a Foundation Fieldbus field device.



Interactive Multimedia Curriculum

### **Technical Data**

Complete technical specifications available upon request

#### T5552-FF1 Assembly EtherNet to Foundation Fieldbus Linking Device **Differential Pressure Transmitter** Transmitter Mounting Hardware 24 VDC Power Supply Portable Storage Case Intelligent FF Interface Unit Power Cord Foundation Fieldbus H1 Cable Multimedia Curriculum (M33331) Instructor's Guide (C33331) Install Guide (D33331) Student Reference Guide (H33331) Supplemental Disc (\$33331) Additional Requirements: Level/Flow Process Control Learning System (T5552A) Flow Transducer (T5552-F1C) Portable PLC Learning System (990-PAB53) and Ethernet Cable (20704) RS Logix 5000 PLC Programming Software -Version 20 Personal Computer with EtherNet port. Requirements: http://www.amatrol.com/ support/computer-requirements Utilities: Electric (120VAC/60Hz) T5552-FF1A Assembly EtherNet to Foundation Fieldbus Linking Device Differential Pressure Transmitter Transmitter Mounting Hardware 24 VDC Power Supply Portable Storage Case Intelligent FF Interface Unit Power Cord Foundation Fieldbus H1 Cable Multimedia Curriculum (M33332) Instructor's Guide (C33332) Install Guide (D33332) Student Reference Guide (H33332) Supplemental Disc (S33332) Additional Requirements: Level/Flow Process Control Learning System (T5552A)

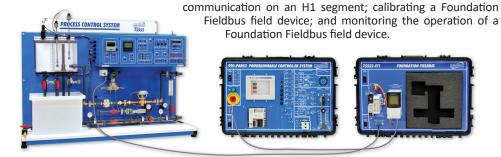
Flow Transducer (T5552-F1C) Portable PLC Learning System (990-PAB53) and Ethernet Cable (20704)

- RS Logix 5000 PLC Programming Software -Version 20
- Personal Computer with EtherNet port. Requirements: http://www.amatrol.com/ support/computer-requirements Utilities:

Electric (120VAC/60Hz)

### **Develop Real Skills Using Industrial Foundation Fieldbus System**

This system includes a variety of real-world industrial components like a differential pressure transmitter, EtherNet to Foundation Fieldbus linking device, Foundation Fieldbus H1 cable, 24 VDC power supply, and Intelligent FF interface unit. These real-world components found in process control and power plant environments can be used by learners to practice actual skills that they'll use in the field. These skills include configuring a Foundation Fieldbus linking device to control



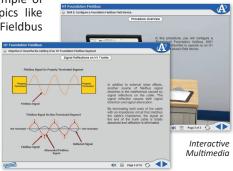
T5552-FF1 Foundation Fieldbus shown with T5552A and 990-PAB53

### Study Real-World Foundation Fieldbus Process Control Applications

The interactive curriculum focuses on combining the theoretical knowledge behind the function and operation of a Foundational Fieldbus network and how this knowledge will help

in understanding the hands-on skills. As an example of the curriculum's depth, learners will study topics like how components are connected to a Foundation Fieldbus

segment, the cabling requirements for Foundation Fieldbus segments, the function of user layer blocks and objects, how a device is configured to perform process control functions and Foundation Fieldbus diagnostic and maintenance capability. This curriculum is presented within a stunning, highly interactive multimedia format that allows learners to explore the presented topics through text, audio narration, 3D animation, video, and interactive quizzes and games.





Amatrol's Process Control Communication Protocol Learning Systems

In addition to Foundation Fieldbus, Amatrol also offers learning systems for two other process control communication protocols, HART (T5552-H1) and SCADA (T5552-S1). Amatrol has developed a full line of process control learning systems and will continue developing new products to meet industrial training needs.

### **Student Reference Guide**

A sample copy of the Foundation Fieldbus Process Control 1 Learning System Reference Guide is also included with the system for your evaluation. Sourced from the system's multimedia curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfect-bound book. Student Reference Guides supplement this course by providing a condensed, inexpensive reference tool that learners will find invaluable once they finish their training making it the perfect course takeaway.





2400 Centennial Blvd. Jeffersonville, IN 47130 USA 800.264.8285 812.288.8285 www.amatrol.com Printed in the USA Copyright © 2024 Form No. 8100-D