# Visualization Process Control 1 Learning System

T5552-S1





WINCC Software

# **Learning Topics:**

- Introduction to Process Visualization
- UDC Controller Configuration
- Process Visualization System Operation
- Application Editing
- Project Screens
- Input and Output Objects
- Two-State Output Objects
- Symbolic I/O Field Output Objects
- I/O Field Objects
- Alarms

The Visualization Process Control 1 Learning System (T5552-S1) covers SCADA (Supervisory Control and Data Acquisition) that allows operators, technicians, and engineers to monitor and control process applications using sensors networked to equipment on the plant floor. These remote sensor readings are collected and displayed graphically in an organized way allowing process control decisions to be made. SCADA is used in many industries including power generation, petrochemicals, and manufacturing. The T5552-S1 connects to Amatrol's Level/Flow Process Control Learning System (T5552A) and PID Controller (T5552-C1-A) to allow learners to operate a real-world industrial control system.

The T5552-S1 uses the popular Siemens WINCC software, a PC-based process visualization program that covers how to develop, program, and operate various types of SCADA functions using an Ethernet networked PC. In addition to hands-on skills, Visualization Process Control 1 includes highly interactive multimedia that provides a learner with the theoretical knowledge to understand how SCADA works and why it's important in industry.



#### **Technical Data**

Complete technical specifications available upon request.

Siemens WINCC Runtime Advanced Software **OPC Server Process Interface Software** PID Controller PC Programming Software **IR Computer Link** Ethernet Switch, 5-port **CAT Ethernet Cables** Student Curriculum – Interactive PC-Based Multimedia (M33305) Instructor's Guide (C33305) Installation Guide (D33305) Supplemental Disk (\$33305 Student Reference Guide (H33305) Additional Requirements: Level/Flow Process Control Learning System (T5552A) PID Controller (T5552-C1-A) Personal Computer. For requirements, see http://www.amatrol.com/support/computerrequirements **Utilities Required:** Electricity: (120 VAC/60 Hz/1 phase) T5552 also requires compressed air

#### Hands-On Experience with an Industrial Control System (SCADA)

Designed to connect to a PID Controller (T5552-C1-A) on Amatrol's Level/Flow Process Controller system (T5552A), the T5552-S1 uses an Ethernet network to communicate with a process control system via PC. Learners will use Siemens

process control system Via PC. Learners will use Slemens popular WINCC process software to operate, program, and monitor real-world process control applications on the T5552A and see how those applications are utilized in modern industry. More specifically, this software provides functions of SCADA that will produce easy-to-read graphical displays on the PC that will allow the learner to monitor analog and discrete inputs and outputs of the PID controller, perform basic control functions such as changing setpoints, and much more!



### Learn Real-World SCADA Applications

Learners will interact with the multimedia curriculum as they learn how to configure the IP address of a UDC 3500 Controller. Major topics covered by this system's multimedia includes the



creation and programming of alarms, reports, messages, data collection, operator control input functions, and graphic process display objects; SCADA software

applications, setup, configuration, and operation; OPC server configuration and operation; and Ethernet interface and communication to process instruments. The T5552-S1's extensive multimedia curriculum combines text, audio, 3D illustration, and loads of interaction to fully engage learners as they are introduced to SCADA and all of its applications in process control.

# **Amatrol Process Control Software Options**

In addition to the T5552-S1, Amatrol offers learning systems that cover additional process control communication software, including HART Process Control 1 (T5552-H1) and Foundation Fieldbus Process Control 1 (T5552-FF1). This library of process control software learning systems offers you a range of product options to ensure that learners get the exact training they need.

# **Complimentary Student Reference Guide**

A sample copy of the Process Visualization Control 1 Student Reference Guide is included with the learning system. Sourced from the curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-bound book. If you would like to inquire about purchasing additional Student Reference Guides for your program, contact your local Amatrol Representative for more information.





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