

# Siemens S7 PLC Analog Application Training | eBook Curriculum



eBook: E40802

The PLC Analog eBook Courseware for Siemens S7300 PLCs adds to the Siemens S7300 Series PLC Troubleshooting courses to teach PLC control of analog input and output devices. Analog I/O capability enables PLCs to more precisely control processes by providing variable output signals and receiving variable input feedback from sensors. Applications include temperature control, liquid level control, and variable speed conveyors just to name a few. Students will learn industry relevant skills including how to operate, interface, program and troubleshoot PLC systems using analog I/O.

## In-Depth Curriculum

### Comprehensive PLC Analog Curriculum

Amatrol's PLC analog curriculum teaches a variety of PLC analog topics, including: sensors; analog input and output module operation and installation; scaling functions; comparison instructions and on/off control; and troubleshooting. Within these topics, learners will study objectives like configuring the parameters of a Siemens S7-300 analog input module; troubleshooting a PLC routine that performs on/off control using an analog input; calculating transducer output given sensitivity, input, and range; and designing a PLC routine that uses an analog output to control an SCR power controller.

### Feature-Packed eBook Format Makes Learning Convenient

Amatrol's eBooks look like a real book and allow users to flip between pages with ease. Enhanced with features such as keyword searches and zoom controls that enable a user to quickly locate and view information, these eBooks are a fantastic learning tool. Amatrol's eBooks are available online and can be used by anyone with access to Amatrol's Learning Management System (LMS). Optionally, if you choose to use your own LMS, these eBooks are SCORM compatible to allow smooth integration into your current training system. Combined with our already extensive library of interactive multimedia titles, which are also SCORM compatible, users can now complete their entire course work online!

## Teach Hands-On Skills

## What are the Advantages of Analog Signals? An Explanation...

Two types of analog signals produced most often by sensors are DC voltage and DC current. The advantage of current-producing sensors is that current devices are affected less by electrical noise than voltage signals and the signal travels further. Due to their nature, some temperature sensing devices like thermocouples and RTDs (resistive temperature detectors) can only produce voltage output. Users, therefore, have no option but voltage if the application requires an input device with the characteristics of an RTD or thermocouple.

## Self-Contained Learning Platform Makes Training Easy

Amatrol's 89-AS-S7300 includes an interchangeable analog application station that enables students to quickly set up the 890-PECB and 890-S7 Learning System for analog study with live components. As with other 890 application stations, the analog station attaches to the application console with quick release connectors. The station stores conveniently under the workstation when not in use. The analog application station includes a 10-turn potentiometer with 0 - 10 VDC signal and digital readout to provide an analog input to the PLC analog module, while the analog output from the PLC is displayed on a second digital readout. Power for the station is supplied from the 890-PECB.

## Additional Info

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## Requires:

- Computer (see [Computer Requirements](#))

## Options:

- PLC Analog Learning System - Siemens S7300 (89-AS-S7300)

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### Address

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