

Siemens S7 PLC Troubleshooting Training | eBook Curriculum



eBook: EB404

Amatrol's Siemens S7 PLC Troubleshooting curriculum teaches troubleshooting, programming and applications of the Siemens S7 PLC.

In-Depth Curriculum

Comprehensive PLC Programming & Troubleshooting Curriculum

Amatrol's Siemens S7 PLC troubleshooting curriculum teaches a wide variety of PLC programming and troubleshooting topics, such as: PLC programming; PLC motor control; event sequencing; application development; PLC systems troubleshooting; discrete I/O interfacing; PLC timer and counter instructions; program control instructions; and math and move data instructions. Within these topics, learners will study objectives like creating and configuring a PLC project using the SIMATIC Manager; designing a PLC program that uses a safety interlock to control the operation of a machine; troubleshooting a PLC-controlled electric motor system; and designing a PLC program which has both halt and cycle stop functions.

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 Programmable Logic Controllers (PLCs)?

Programmable logic controllers (PLCs) are industrial computers. They provide a means of controlling machines and other industrial applications with a computer instead of using hard wired devices, such as relay coils and contacts. PLCs can control any number of industrial applications, including robots, environmental control in buildings,

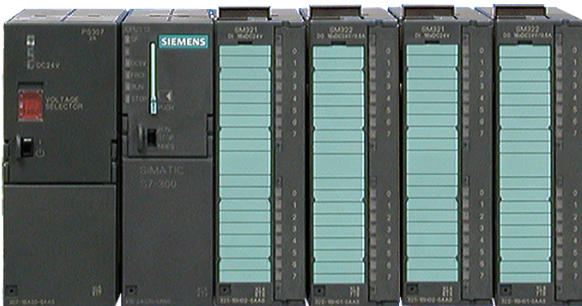
assembly machines, security systems, and automatic transfer lines.

What are the Advantages of a PLC?

The PLC gives industry the power, speed, and flexibility of a computer. By replacing mechanical components with a PLC, the control of a process becomes faster, cheaper, and therefore, more efficient. The PLC is a better choice than relays or a standard computer for several reasons. These include:

- **Less Space** - A PLC requires much less space than a standard computers or a relay panel that could do the same job.
- **Lower Cost** - A PLC can cost as little as four or five relays, but is can replace hundreds of relays.
- **Resistant to the Environment** - A PLC's casing is industrially hardened to withstand the harsh environment of a factory.
- **Direct Interface** - Standard computers require a complex and limited system to interface to real world components, while a PLC can be directly wired to these components.
- **Easy Programming** - PLCs most often use a programming language called ladder logic. This language is based on industrial standard symbology used in hard-wired relay systems.
- **Flexibility** - PLC programming can be changed much more quickly than hard wired relays and a PLC requires few (if any) component changes.

Additional Info



Requires:

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

Options:

- PLC Troubleshooting Learning System - Siemens S7 (890-S7312B/890-S7315B)

Address

Amatrol
2400 Centennial Blvd
Jeffersonville, IN 47130

Contacts

email: contact@amatrol.com
phone: (800) 264 8285