# PLC EtherNet Training | eBook Curriculum



eBook: E40666

The PLC EtherNet eBook curriculum adds to the Allen Bradley ControlLogix PLC Troubleshooting Learning System to teach the fundamentals and troubleshooting of industrial communications networks using EtherNet/IP. These fundamentals include: basic PLC operation and programming, motor control, event sequencing, I/O interfacing and testing, process control, and material transfer. EtherNet/IP has become very popular as an industrial communications network because of its high data transfer speed, flexibility of communication on both the enterprise level and the automation and control level, and by offering a choice of vendors when purchasing equipment.

## **In-Depth Curriculum**

### **Comprehensive PLC EtherNet Curriculum**

Amatrol's PLC EtherNet curriculum teaches PLC EtherNet topics, including: industrial communications networks; remote I/O; produced/consumed data and messages; and troubleshooting EtherNet/IP. Within these topics, learners will study objectives like installing a 1756-ENBT EtherNet/IP module in a ControlLogix chassis; creating a ladder routine that uses EtherNet/IP remote I/O; configuring a MSG instruction to transfer data between ControlLogix controllers; and troubleshooting EtherNet/IP network faults.

## Feature-Packed eBook Format Makes Learning Convenient

Amatrol's <u>eBooks</u> 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 Common Symptoms of an EtherNet Network Failure?

EtherNet/IP networks are highly reliable, providing the communications needed for 24/7-production facilities.

Failures are rare, but because of the wise-spread nature of networks, they can be a challenge to troubleshoot. Network failures are frequently discovered while troubleshooting a controller problem. For example, the operator complains that a motor is not running at the correct speed. The troubleshooter determines the motor speed setpoint has not be received from another controller and suspects a network problem.

There are three general symptoms of a communications network failure:

- Data is transferred with errors
- Data transfer is intermittent
- Data is not being transferred

## **Gain Hands-On Experience with Real Industrial Components**

The 89-EN-AB5500 features two 1756-ENBT ControlLogix EtherNet/IP modules, two EtherNet 5-port switches, a cable connector set with five patch cables and a cross-over cable, two DIN rail-mounted 24-VDC power supplies and more! Specific hands-on skills that will incorporate these components include: setting the IP address of a 1756-ENBT EtherNet/IP module, converting a project using local I/O into one using Remote I/O, and transferring data between controllers using produced and consumed tags on EtherNet/IP.

### **Additional Info**



#### Requires:

• Computer (see Computer Requirements)

## Options:

• PLC EtherNet Learning System - ControlLogix (89-EN-AB5500)

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