PLC EtherNet Learning System - AB ControlLogix

89-EN-AB5500









Optional eBook and Student Reference Guide

Learning Topics:

- Industrial Communications

- Troubleshooting EtherNet/IP
- Viewing EtherNet/IP Network

Amatrol's PLC EtherNet Learning System (89-EN-AB5500) teaches the fundamentals and troubleshooting of industrial communications networks using EtherNet/IP. EtherNet/IP has become very popular as an industrial communications network, offering high data transfer speed, flexibility of communicating on both the Enterprise level and the Automation and Control level, and a choice of vendors when purchasing equipment. It is important for technicians to understand different types of networks and their operation to be able to install and troubleshoot not only networks, but also the interconnections to the PLCs.

The main components of the 89-EN-AB5500 are two EtherNet/IP PLC modules and two EtherNet 5-port switches. Learners will use these components with additional required learning systems including the PLC Troubleshooting Learning System – AB ControlLogix (890-AB5500) to practice fundamentals such as: basic PLC operation and programming, motor control, event sequencing, I/O interfacing and testing, process control, and material transfer. Amatrol uses industrial-quality components for durability to stand up to frequent use and so that learners can get real-world experience with components that they'll actually see in the field.

Technical Data

Complete technical specifications available upon request.

ControlLogix Ethernet/IP Modules (2) 1756-ENBT Ethernet 5-port Switches (2)

Cable Connector Set
Patch Cables (5)
Cross-Over Cable

DIN rail-mounted 24VDC Power Supplies (2) 3-Conductor Universal Jumpers (4) AC Power Distribution Assemblies(2) Network Cable Tester Student Curriculum (40666) Instructor's Guide (40676) Installation Guide (40686)

Student Reference Guide (H40666) Additional Requirements

Computer (2), see requirements: http://www. amatrol.com/support/computer-requirements PLC Troubleshooting Learning System – AB ControlLogix (890-AB5500) (2) Programmable Controller Troubleshooting

Workstation (890-PECB) (2)
Operator Applications Station with Programmable
Display (89-OS-PDS)
1/O Simulator Application Station (89-IOS)

BCD/LED Application Station (89-BCD)
Electro-Pneumatic Application Station (89-EP)

Electricity provided by 890-PECB

Gain Hands-On Experience Operating, Installing, Configuring and Troubleshooting EtherNet/IP Networks

High-speed networks link sales, purchasing, shipping, production control, and the PLCs on the plant floor together for the rapid exchange of data between departments within a manufacturing facility. This has become an integral part of the production process, so the 89-EN-AB5500 offers learners the opportunity to practice industry-relevant skills including how to operate, install, configure and troubleshoot EtherNet/IP networks.

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.



89-EN-AB5500 with all requirements

Build Foundational Knowledge of Industrial Communication Networks Online with an Optional eBook Format

The 89-EN-AB5500's curriculum begins with an introduction to the operation, installation, and configuration of industrial communication networks and moves into more ad-



vanced topics such as remote I/O, produced/ consumed data and messages, and troubleshooting EtherNet/IP. Specific learning objectives include: the operation of connections in a ControlLogix Remote I/O network, four causes of faults in an EtherNet/IP network, and how

to troubleshoot the MSG instruction. In addition to the included printed curriculum, Amatrol also offers this course in an online eBook format. Amatrol's eBooks provide easy, quick navigation and searchable course content in an online, computer-based format.

Student Reference Guide

A sample copy of the Mastering Programmable Controllers (ControlLogix EtherNet/IP) Student Reference Guide is also included with the system for your evaluation. Sourced from the system's curriculum, the Student Reference Guide takes the entire series' technical content contained in the learning objectives and combines them into one perfectly-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.



