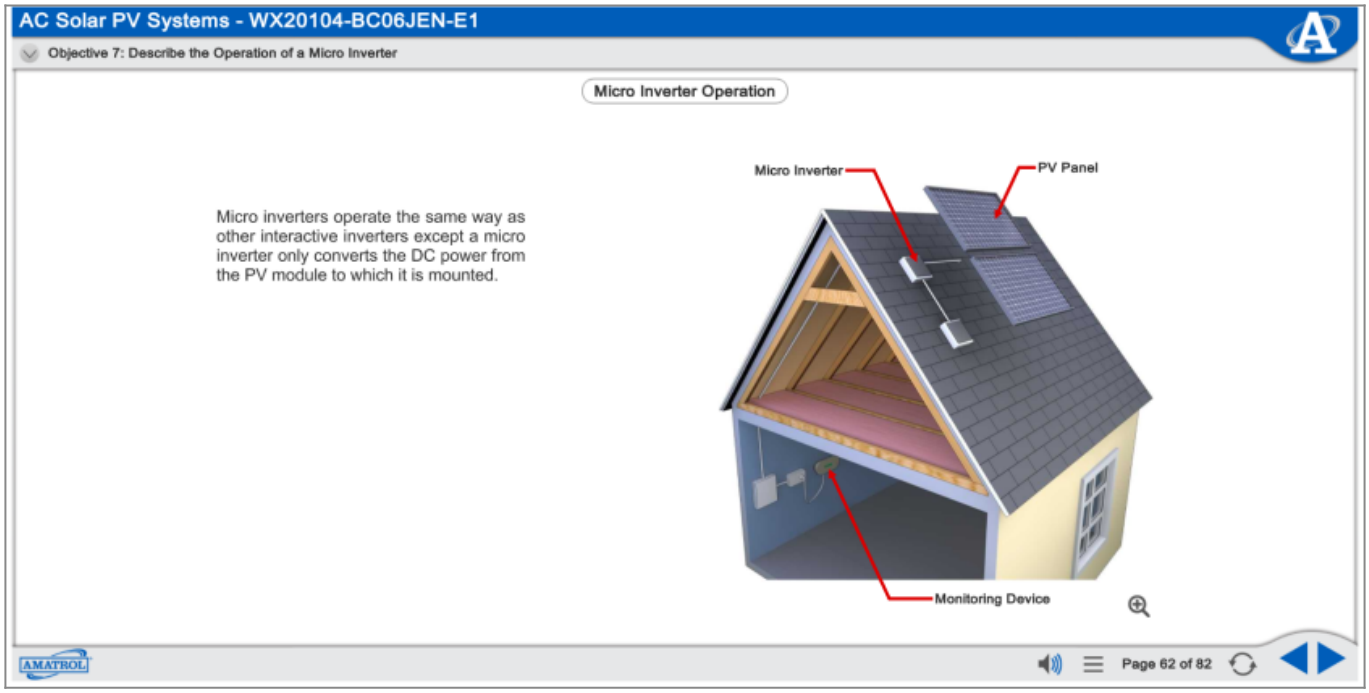
Solar PV Troubleshooting eLearning Course | Hands-On Photovoltaic Skills



eLearning Course: M20104

Amatrol's Solar PV Troubleshooting eLearning teaches installation and maintenance of solar photovoltaic (PV) systems across the types of PV systems commonly used such as AC, DC, and grid-tie. Learners develop the specialized skills and knowledge needed for solar PV systems, including connection and operation of the many types of solar PV systems, programming or configuring inverters and charge controllers, sizing systems and components, analyzing performance, and troubleshooting problems system wide. It supports the knowledge needed for the NABCEP (North American Board of Certified Energy Practitioners) test for certified solar PV system installer. Solar PV troubleshooting covers PV module performance, PV array connection, solar batteries, DC & AC solar PV systems, charge controllers, PV inverters, grid-tie systems, energy conservation and demand, and component sizing in addition to system level problem solving.

Teach Photovoltaic Skills

What is a PV Cell?
A photovoltaic (PV) cell is a semiconductor-based component that produces electrical power by absorbing light energy and converting it into electrical energy. The average power produced by a PV cell is relatively small (approximately 3 watts), so it requires a combination of several cells into a solar panel to produce significant power.

The growing interest in alternative energy and renewable resources has created a shortage of qualified solar energy technicians throughout the green energy sector. Once rare, solar panels now appear on tops of homes and businesses, atop informational road signs, and in groups by the hundreds in large solar “farms” all across the country.

What Skills Do Solar Energy Technicians Need?
Solar technicians need basic knowledge and hands-on skills in a variety of foundational technologies, such as electrical and electronics, as well as advanced abilities related directly to the latest solar energy technologies.

Amatrol's Solar PV Troubleshooting eLearning course (M20104) teaches a range of solar photovoltaic operation, maintenance, and troubleshooting skills in a convenient and effective eLearning format that gives learners a solid foundation in solar technologies.

Interactive eLearning

Solar PV Troubleshooting eLearning Features Engaging Multimedia
Amatrol's interactive multimedia eLearning curriculum teaches solar PV troubleshooting topics using text, audio, video, interactive quizzes, and stunning 3D animations to appeal to a variety of different learning styles. Learners begin with the basics, such as PV module operation and performance, solar batteries, and PV array characteristics.

From there, they steadily advance to more complex concepts and skills, including charge controller configuration and operation; grid-connected PV systems; battery backups; and system- and component-level troubleshooting.

This eLearning course is broken down into seven convenient segments:

- PV Module Operation
- PV Module Performance
- Photovoltaic Arrays
- Solar Batteries
- DC Solar PV Systems
- AC Solar PV Systems
- Troubleshooting

Learners using Amatrol's eLearning will find that its comprehensive, detailed curriculum teaches both the foundational knowledge and practical hands-on skills (using Amatrol's Solar PV Troubleshooting Learning System (950-SPT1)) they need to troubleshoot the most common solar PV systems, including AC, DC, and grid-connected systems.

Additional Info

Requires:

- Computer (see Computer Requirements)

Options:

- Solar PV Troubleshooting Learning System (950-SPT1)

Address

Amatrol
2400 Centennial Blvd

Contacts

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

Jeffersonville, IN 47130