



SOLAR PV
GT-1000

SOLAR PV TECHNOLOGY PROGRAM

Alternative Energy Generation

- History of fossil fuels
- Environmental concerns
- Price convergence

Energy and Power

- Types of energy
- Potential and kinetic energy
- Voltage and current
- Electrical loads

Passive Solar systems

- Angular and reflective light
- Passive solar heating
- Passive solar cooling and shading
- Convective and evaporative cooling

Active Solar Systems

- Photovoltaics
- PV modules and ratings
- Inverters and metering
- Thermal heating and collection

Design & Installation of Residential Scale Photovoltaic Systems

- Mounting PV modules
- Array orientation
- Battery systems and wiring
- PV charge controllers
- Grid-tie metering

Troubleshooting PV Systems

- Locating and isolating bad panels
- Locating bad terminals, wiring and connectors

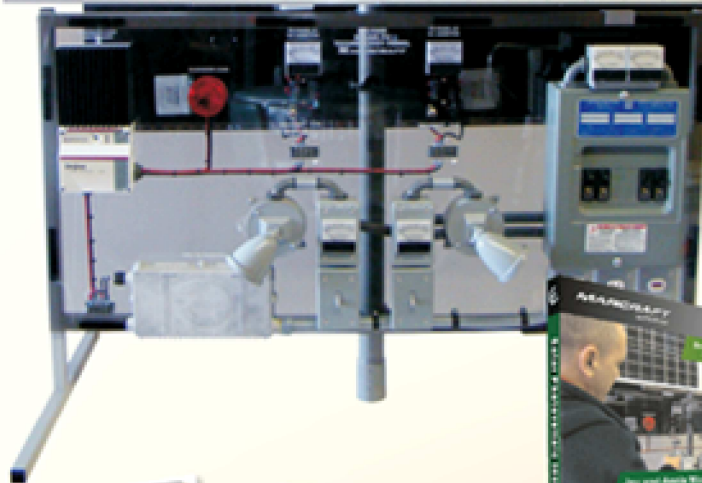
Building Codes and Compliance

- National Electrical Codes
- Underwriters Laboratories
- OSHA
- National Fire Protection Association

Understanding Blueprints

- Schematic drawings
- Working drawings
- Symbols and scaling

Reinforced with Hands-on Labs



**HANDS-ON
LAB GUIDE**



CERT

An Industry Certified Program

