# Solar Photovoltaic Trainer

Educational Training Equipment for the 21st Century

**Bulletin 234-4D** 

#### H-SPT-AC-1A

Solar Photovoltaic Trainer

### **Description**

The Hampden Model H-SPT-AC-1A is a control system trainer which lets the student technician examine the electrical layout and operational features normally associated with a photovoltaic power source. The trainer demonstrates the electrical characteristics of the solar array, storage battery, AC and DC distribution, and AC and DC loading. The complete charging sequence can be observed.

#### **Specifications**

The Hampden **Model H-SPT-AC-1A** contains two 55W polycrystalline solar photovoltaic modules mounted on an adjustable carriage which can be tilted for optimum exposure with a nominal voltage output of 15.5V DC at 2.26A, an invert-

er that converts the DC to 120VAC single-phase at 375W, a high-capacity solar battery, controls to monitor power from solar modules and to switch to battery power when necessary, four test points, two power take-off points (12V DC and 120V AC), a 0-15V DC voltmeter, a multi-range DC ammeter, and a 0-150V AC voltmeter. The mobile frame is constructed of code gauge furniture stock steel with four swivel casters, two with locks. Furnished complete with a set of interconnecting cords.

## **Options**

- H-SPT-AC-CDL Computer Data Logging
- H-SPT-AC-SPS Solar Panel Set to include:
  - (2) 55 watt mono-crystalline panels
  - (2) 50 Watt amorphous (thin film) panels





All Hampden units are available for operation at any voltage or frequency

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