

# Smart Grid Trainers

Educational Training Equipment for the 21st Century

Bulletin 190-2C

## 190 Series Smart Grid Trainers

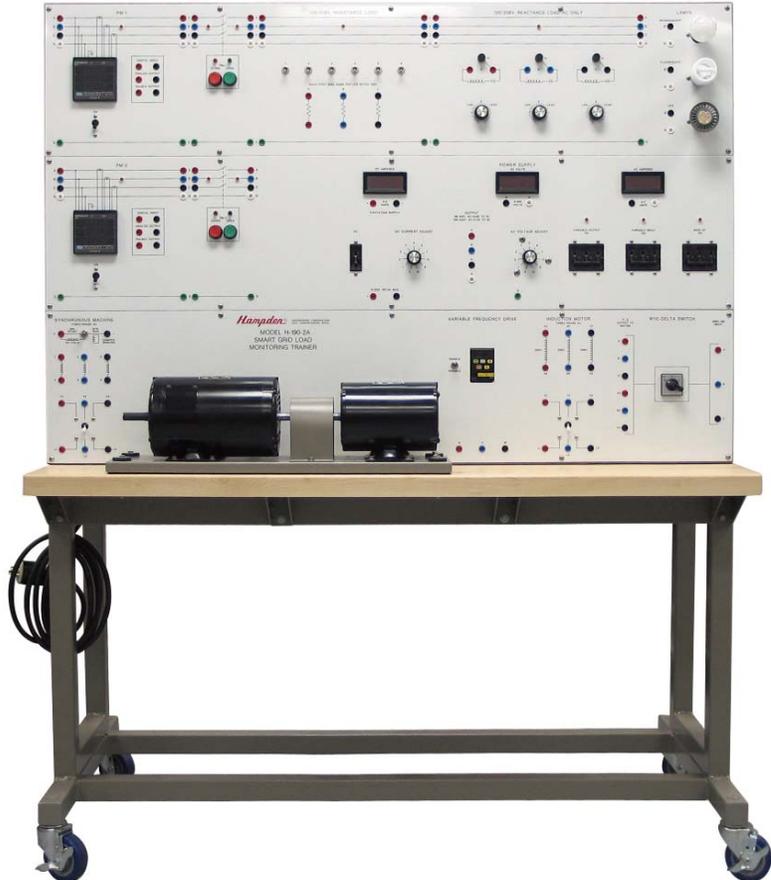
### Purpose

The **Hampden 190 Series** of Smart Grid Trainers have been developed to educate students with the technology being used in the field of electrical power generation and distribution. Each individual module will demonstrate a key section of the power grid. When the individual modules are combined a modern smart grid is created.

The Hampden **Model H-190-2A** Smart Grid Load Monitoring Trainer focuses on the area of consumer consumption. Investigating the best ways to maximize power usage. Covering dynamic loads and manual and automatic compensation of reactive power.

### Features

- Lamp Load
- Inductive Load
- Capacitance Load
- Resistance Load
- Synchronous Machine
- Induction Motor
- Power Controller
- Wye-Delta Switch
- AC/DC Power Supply
- Three Phase Power Meter (2)
- H-LTCS Laptop Computer
- Manuals
- Interconnection Cords
- Coupling and Shaft Guard
- Color Coding
- Variable Frequency Drive



**Hampden Model H-190-2A**  
Smart Grid Load Monitoring Trainer  
Dimensions: 75"H x 60"W x 32"D  
Shipping Weight: 901 lbs.

### Topics Covered

- Wye and Delta Connections
- Staged Power
- Synchronous and Asynchronous Loads
- Reactive Power
- First and Second Power Monitoring
- Local & Remote Operation
- Dynamic Loads
- Energy Flow Reversal
- Compensation Capacitors

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

**Hampden**  
ENGINEERING CORPORATION

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