## **POWERMASTER® MODEL 8803A**

Transformer Rated and Self-Contained Metering Site Training Bench



# R A D I A N Research

Power and Energy Measurement Solutions

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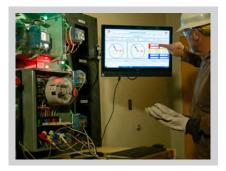
The PowerMaster® 8803A allows the technician to test meters under customer load (passive) or provide an artificial load (active) from the PowerMaster test equipment. The Trainee can simulate field conditions by adjusting amplitudes and phase angles to test the electric meter under a variety of conditions, including conditions beyond its calibrated range. Also, while combined with one of the Model 8803A's predefined Error Scenarios, Trainees can safely learn about metering problems they may encounter in the field for a customer complaint call.

### **POWERMASTER®** MODEL 8803A

Transformer Rated Metering and Self-Contained Site Training Bench

#### **User Interface**

The PowerMaster® 8803A uses an integrated Windows-based touchscreen interface to select and modify a simulated error scenario while located at the bench. This display is mounted on an articulating arm to maximize bench space and enable line-of-sight while standing.



#### **Troubleshoot Metering Connections**

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#### **Troubleshoot Instrument Transformers & Wiring**

The Model 8803A allows the technician to test both CTs and PTs installed on the training simulator using a PowerMaster analyzer. The configuration allows easy access for flexible current probes, clamp-on probes, or Amp/Volt Litewire probes. By simulating different amplitudes from the Model 8803A, the Trainee can learn how instrument transformers perform outside of their rated accuracy range.

#### Simulate Errors Found in the Field

One of the most powerful features of the Model 8803A is the ability to simulate more than 30 metering errors commonly found in the field within the comforts and safety of a lab environment. The PowerMaster® 8803A is designed to automate pre-defined error scenarios that do not require the user to physically change or modify any wiring. The Trainee can also override amplitudes and phase angles for further troubleshooting and run simulations of prior errors encountered in the field.

#### **Safety**

The PowerMaster® 8803A takes every consideration to ensure the classroom maintains a safe environment for teaching. The Model 8803A includes a lighted beacon mounted on top to alert when the bench is active, and each meter, CT, and PT have illuminated lights when energized. Before a test can begin, the Trainee must interact with the bench to ensure all PPE is properly outfitted. Lastly, the Model 8803A has a manual Emergency Stop integrated both on the bench and located on the touchscreen display.

#### **Specifications**

#### **User Interface**

- Touchscreen (21.5") Custom Control System
- Custom software for voltage and current control
- Articulating mounting arm

#### **Training Bench**

- · Locking Casters
- Locking Drawers
- · Storage Shelf
- · Brackets for Wall Mounting

#### Three Phase Voltage and Current Source

- 19" Rack mounted design integrated in bench
- 30-480V (277 phase-Neutral; 480V phase-phase) RMS max per phase
- 100mA-30A RMS max per phase current source
- Phase angle adjustment from 0° to 360° in 0.1° steps each phase
- Frequency generation at 60Hz
- · Ability to remove from bench for maintenance

#### **Metering Services**

- 15 Meter (120V)
- · 25 Meter (240V)
- 12S Meter (3W Network)
- 16S Meter (4W Wye)
- 9S Meter (4W Wye)

#### **Current Transformers**

• 200:5 Window Type Instrument CTs

#### Potential Transformers (with protective enclosure)

• 2:1 (240V:120) Instrument PTs

#### **Bench Dimensions**

• 73" width x 79" height x 36" depth

#### Weight

• 340kg (750 lbs)

#### **Power Requirements**

- Auxiliary Power Input: 1x Single Phase 120V Outlet with Ground, 15A
- Bench Power Consumption: 700VA max
- PC Power Consumption: 200W

#### **Operating Environment**

- •25°C±5°C
- 30% to 80% Relative Humidity, Non Condensing

#### Warranty

• 2 Year Parts and Workmanship

