LP Management Services, Inc.
*Specializing in Safety, Health and Risk Management Consultation*

# Electrical Meter Application & Usage

Although a basic element of any testing or troubleshooting endeavor, meter usage is still widely misapplied or underutilized. This course utilizes hands-on practice to demonstrate the proper application of common electrical meters. Students will measure voltage, current, resistance, and other typical parameters, compare them to calculated values, and then interpret the findings to determine the health of a system. Although the instructor will have examples of the meters covered in the course students should also bring their workplace meters to ensure familiarity and understanding of their own equipment. This course not only covers simple meter usage and application, it seeks to develop and enhance the critical thinking skills of the participants.

Duration: 8 Hour Program

**METERS COVERED**
Fluke 87V
Fluke 117 and/or Fluke 179
Fluke T5-600 or T5-1000
Ideal SureTest Circuit Analyzer 61-164 or 61-165
Fluke 1AC-A1-II
*Additional or alternate meters may be covered to meet needs of the participants*

**SAFETY**
Inspections and calibration
Meter ratings & categories
Setup and connections
Hazards of incorrect connections
Appropriate PPE

**USAGE**
Intended applications
Knowing which meter to select
Knowing your meter's functions
Root-Mean-Square measurements
Max and Min functions

**THEORY**
Ohm's Law
Power Rule
Kirchoff's equations
Applying the formulas
Confirming the math with actual readings

**HANDS ON TESTING**
Utilizing the mock Up
Voltage readings
Current measurements
Resistance and continuity
GFCI Testing
Troubleshooting a system as a whole

**ANALYSIS**
Documenting measurements
Interpreting readings
Explaining inconsistencies