



# ELECTRICAL POWER QUALITY MEASUREMENT

## 2-DAY TRAINING COURSE

Powerpoint Engineering Ltd are experts in the supply of Power Quality and Energy Monitoring solutions in Ireland.

The aim of the course is to give the attendee an understanding of what Power Quality is, typical Measurement Equipment, Power Quality Standards, Data Analysis and how to measure Power Quality Safely.

### LEARNING OBJECTIVE:

On successfully completing this course and multiple-choice examination the attendee should have good knowledge of the following:

- What is Power Quality?
- Typical measurement equipment
- Power Quality Standards
- Power Quality measurement parameters
- How to measure Power Quality safely
- Typical connection / configuration arrangements
- Understanding the hardware / components
- Downloading the measured data (Wifi, USB & Remote Access)
- Analysing the data and creating a report and standard compliance checks

### WHO SHOULD ATTEND:

This Training Course is suitable for Facilities Managers, Electrical Engineers & Electricians, Electrical Maintenance operatives, Consultants and designers

### COURSE CONTENT:

#### Day 1:

- **Introduction to Power Quality**
- Power Quality Standards (IEC 61000 Series, EN 50160, CBEMA, ITIC, Harmonics Theory)
- Voltage & Current Harmonics & Direction
- Voltage Disturbances
- Current Inrush
- High Speed RMS Chart Recording
- Loads that generate harmonics
- Effects of harmonics
- Sample Standards Compliance Report

#### Day 2:

- Power Quality Surveys
- Harmonic Measurement and Standards
- Solutions to Harmonic Distortion
- Causes of unbalance
- Voltage Fluctuations - Flicker, RVC
- Sample Measurement with Analysis Report, Recommendations.
- Sample Power Quality Solution – Selection, Installation & Commissioning

### COURSE FEE:

The cost of this course is very competitively priced at **€1,250 per person** (based on min. 6 persons).

### TRAINER'S PROFILE:

Our trainer has over 15 years' experience in the electrical power quality industry.

He is recognised as one of the experts in Ireland in electrical safety. His particular areas of expertise include:

- Substation Testing & Safety
- Power Quality and Energy Monitoring Surveys
- Design, Installation & Commissioning of Power Quality and Energy Metering Systems
- LV & MV power cable terminations