

# Power Quality Services: Get more from your power with a **CHK Power Quality Investigation and Audit**

Organisations today are becoming aware of the benefits to monitor and improve their Power Quality. Our aim is to identify areas for improving Power Quality for the efficient utilisation of electrical energy and to provide practical cost effective solutions to ensure you **get more work from your power**.

## Benefits

- Avoid penalty charges due to poor power factor
- Lower electricity bills
- Extending the life of electrical equipment
- Lower ongoing plant maintenance costs
- Mitigate unanticipated future capital costs

## Why choose us?

Confidence! - our professional engineers have many years of industrial experience and know-how in developing power quality products, systems and solutions for both LV and MV electrical power networks.

## Instruments used

We use our own Power Quality Analysers which are certified to IEC61000-4-30, Class A, ensuring the highest level of data integrity. Our instruments are IP65 and IP66 rated and therefore lend themselves to outdoor applications, for all weather conditions.

## Applications

- Load and energy surveys
- Steady state voltage investigations
- Nuisance tripping of Residual Current Devices.
- Monitoring a motor to determine the cause of overheating
- Monitoring capacitor banks and neutral current
- Condition monitoring of leakage current in Surge Arresters
- Load unbalance in three phase systems
- Event recording at a plant to determine cause of random shutdowns
- Monitoring Variable Speed Drives

## Symptoms of poor Power Quality

- Low power factor
- Unstable mains frequency

- Large variations in mains voltage
- Voltage and current unbalance
- Voltage and current harmonics
- Flicker and interharmonics
- Dips and swells
- Excessive levels of mains signalling
- Transients
- Interruptions

## Power Quality Services

### How we can improve your Power Quality

- Start with an onsite Power Quality investigation and includes:
  - Monitoring your distribution board for a minimum of one week;
  - Analysing logged data and assess for non-compliances (in accordance to the relevant Power Quality standards);
  - Assess for external events and influences; and
  - Preparing a Power Quality report which (a) details power quality parameters; (b) identifies problem areas; and (c) provides recommendations and mitigation strategies where and if required.
- Benchmark your Power Quality and scope your electrical landscape with:
  - Annual audits; or
  - Continuous monitoring and accessing your data remotely via Cellular communications.
- Our professional engineers can propose, design and implement a tailored cost effective Power Quality solution.

## Rental services

You can rent Power Quality products from us at competitive prices and include:

- Load loggers; Power Quality Loggers and Analysers; Transformer monitors; and Accessories.

Our engineers can also provide:

- Product training
- Installation assistance
- Data analysis
- Technical support