



Seven Major Markets Served.

- » Biotech/Healthcare
- » Commercial
- » Education
- » Manufacturing /Industrial
- » Public/Government
- » Technology
- » Transportation



Test. Evaluate. Save. Total Building Power Quality Analyzing Solutions.

DeBra-Kuempel's power quality and energy analyzing services help determine whether power quality issues are affecting the operation of critical loads and therefore causing a negative impact on a client's bottom line. Whether checking the performance of motors and generators, trying to discover the source of an intermittent power problem, or performing an energy study, DeBra-Kuempel helps give clients the data needed to quickly identify any upcoming power and energy issues.

We can measure everything: True RMS, peak voltage and current, frequency, dips and swells, transients, interruption, power and power consumption peak demand, harmonics up to the 50th, inter-harmonics, flicker, mains signaling, inrush and unbalance.

Assessing Energy. Analyzing Power.

DeBra Kuempel's assortment of power quality assessment solutions can help with the following:

» Total Harmonic Distortion (THD)

Harmonic distortion can have a detrimental effect on electrical equipment. Unwanted distortion can increase the current in power systems. If left unchecked, increased temperatures and interference can greatly shorten the life of electronic equipment and cause damage to power systems.

» Predictive Maintenance

Periodic benchmarking of the power system can help detect power quality issues before they cause downtime.

» Energy Monetization

Calculate the cost of energy waste due to poor power quality.

» Energy Assessment

Quantify the before and after installation improvements in energy consumption to justify energy saving devices.

» Low Power Factor

This is influenced by inductive loads such as motors or other processes like welding; if too low the utility company can impose a "PF" penalty on your bill.

» PowerWave Data Capture

Capture every waveform for up to 5 minutes along with fast RMS values to determine how the voltage, current and frequency values are interacting.



From Troubleshooting to Measuring to Capturing Data.

Our state-of-the-art power analyzer allows us to perform:

- » **Frontline Troubleshooting**
Quickly diagnose problems on-screen to get your operation back online.
- » **Long-Term Analysis**
Uncover hard-to-find or intermittent issues.
- » **Load Studies**
Verify the available electrical system capacity before adding loads.
- » **PowerWave Data Capture**
Capture every waveform for up to five minutes along with fast root mean square (RMS) values to determine how voltage, current, and frequency values are interacting.
- » **Power Inverter Efficiency**
Measure the input and output power simultaneously to discover whether the inverter is optimized for its application.

Warning Signs for Hidden Electrical Problems.

Hidden electrical problem typically start with:

- » Repeated equipment failures
- » Random equipment resets or process failures
- » Breakers tripping or fuses blowing with no signs of overloading
- » Transformers or motors running hot
- » Uninterruptible power supplies (UPS) frequently going on line
- » A power factor (PF) penalty on your utility bill

Building Relationships, Building Solutions.



DK 200102

How Can We Help You?

Cincinnati Office (HQ)

3976 Southern Avenue, Cincinnati, OH 45227

T 513.271.6500 F 513.271.4676 dkemcor.com

Columbus, OH • Dayton, OH • Louisville, KY • Maysville, KY • Lexington, KY • Ashland, KY • Paintsville, KY • Evansville, IN



DeBra-Kuempel

An EMCOR Company