

## Power Meter Market Applications

### Custom Sensors and Transformers



The ever-increasing demand for electric power not only requires more generating capacity but more efficient use of the electricity that is available for consumers today. To accomplish this goal utility companies are turning to 'smart meters' which can measure, monitor, collect and analyze how electricity is being used in the home or the industrial workspace. Many Smart Meters offer additional capabilities like remote connect/disconnect of power or tamper detection circuitry.

Standex Electronics is supplying state of the art technology to help achieve these Smart Metering goals. Applications include: Reed switch based sensors that indirectly detect whether the remote connect/disconnect system has functioned properly. A reed switch sensor is typically part of a feedback loop that sends a signal to the Utility's control center confirming that the meter has executed its commands correctly. There is no room for error when electricity is involved.

Reed switch based sensors that are used in anti-tamper circuitry. This feature is often requested by Utilities on both Smart Meter and traditional meter applications. Since most meters are installed in accessible locations an anti-tamper feature can be a critical part of a robust power network.

Standex is also a world leader in designing and manufacturing custom current sense transformers, inductors, and chokes for monitoring power. Future applications include measuring power consumption of home electronics, home appliances, and other pieces of equipment as part of a power management system. The more we understand how we use power, the more intelligent we can be in using it most efficiently.

Smart electrical networks need the products and capabilities of Standex Electronics.

#### Capabilities include:

- Engineering expertise in design and manufacturing of custom electronic components
- High speed, high volume production lines
- Global sourcing and manufacturing footprint for efficient, cost effective supply chain management
- Connector & Terminal Engineering
- Hi-volume, Progressive Die Stamping
- Experienced in UL, CSA, IEC, TUV & VDE Standards
- Mechanical Engineering & Electronic Component Packing
- 3-D Solid Modeling Design
- Plastic Molding Capabilities
- Wire Prep and Wire Harness Assembly
- Rapid Prototyping
- Glass to Metal Sealing
- Laser welding
- Magnetic component engineering
- Power Supply & Other Systems Engineering
- 52ga - 8ga & Foil Magnetic Component Winding
- Wind and assemble all core shapes and types including laminated
- Sensor & Reed Switch Engineering
- Complete lab & test capabilities for Mil/Aero, automotive and other industries as required



**Call today to see how  
Standex engineers can  
help with your metering  
applications!**

## Power Meter Market Product Guide

### Laboratory test capabilities for Power Meter applications:

- Thermal Shock Testing (-70°C to 200°C, LN2 boost assures less than a 5 minute air-temperature recovery time).
- Thermal Cycle Testing (-68°C to 177°C)
- Humidity Testing (-18°C to 93°C, 98% RH, cycle temp or steady state).
- Vibration Testing (Sine or Random profile, 1" pk-pk displacement, 0 to 80 g pk, 5 to 2000 HZ)
- Mechanical Shock Drop Testing (½ sine 50g 11ms, ½ sine 1500g .5ms, or sawtooth 100g 6ms)
- Hi Temp Testing (Up to 260°C)
- Salt Fog Testing
- Solderability Testing



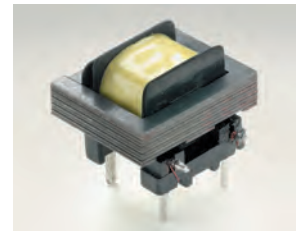
Custom components to fit any need



SMD packages for glass break detectors and metering applications



Reed Switches for a variety of Proximity & Fluid Level Sensing Applications



PC-Mount Low Cost Current-Sense Transformer

