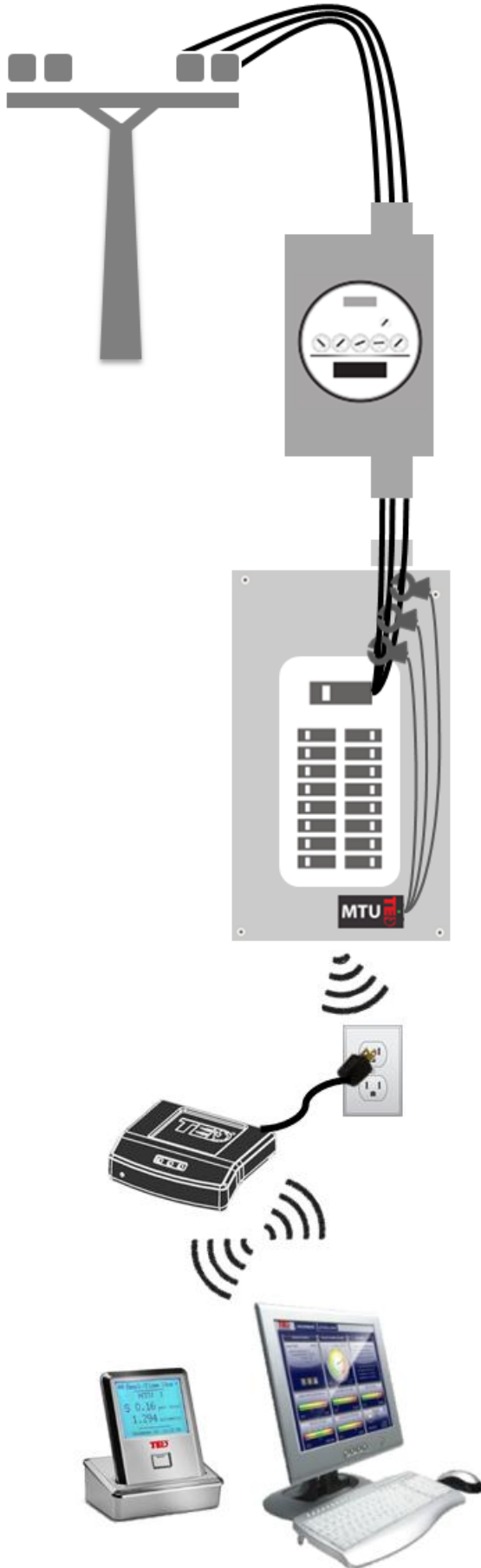


# How **TED** Pro Works



TED's three phase electricity monitoring system works with a building's existing electrical system to collect, analyze, & store electricity data in five simple steps:

## **1. ELECTRICITY FLOWS INTO BUILDING FROM UTILITY**

Electricity travels from the utility to a building's meter, where the utility measures the amount of electricity usage. Electricity then flows into a building's breaker panel through three main incoming conductors.

## **2. CLAMPS PLACED AROUND INCOMING WIRES**

Inside the breaker panel, Current Transformers (CTs) are clamped around the main incoming wires to provide an accurate electrical reading of the amount of electricity the building is using. CT data is sensitive to one watt with a +/- 2% accuracy.

## **3. MEASURING UNIT COLLECTS AND SENDS DATA**

Inside the breaker panel, the CTs are directly connected to a Measuring Transmitting Unit (MTU). The MTU sends the data via Powerline Carrier Communication (which travels over the existing power line) or by using a direct Ethernet connection.

## **4. ENERGY CONTROL CENTER RECEIVES AND STORES DATA**

An Energy Control Center (ECC) is the data-receiving hub that analyzes and stores real time electricity data. The ECC is embedded with Footprints data logging software and can connect to any computer or router. The ECC also can be equipped with a ZigBee U-Snap card to communicate with the optional handheld wireless display.

## **5. SOFTWARE PROVIDES INSTANT VALUABLE INFORMATION**

Embedded in the ECC is TED's interactive Footprints software, which can be viewed on a computer (locally or remotely), smart phone, wireless display (via ZigBee), or any other internet-enabled device. TED's comprehensive data provides instant electrical data in both dollar and kW/hr amounts, allowing business owners/managers determine how to lower their electricity bill.