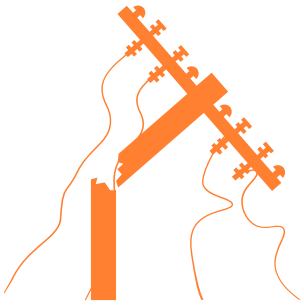
ADVANCED METER FAQs



Faster Identification

Smarter Tools

Better Communication

What is an advanced meter?
An advanced meter, is an energy measurement device that provides customers with timely information on their energy usage through the SmartHub application. It determines how much energy is used, when it is used, the number and duration of power interruptions, voltage levels and other information for efficient and reliable energy delivery. Part of a communication network between utilities and customers, advanced meters enable automated meter readings, outage detection, and power-quality management.

Why is it necessary to upgrade the current electric distribution system?
With the rise of smartphones, smart home technologies and clean energy solutions like electric vehicles, grid modernization is essential to keep up with today's requirements. The current infrastructure – more than 600,000 miles of transmission lines – is rapidly experiencing limitations. In fact, Americans experience around 3,500 power outages every year as a result of this aging infrastructure (many parts of our electric grid were constructed in the 1950s and 60s). An advanced power grid will give MCPU the ability to meet today's energy needs and continue to deliver safe and reliable energy for consumers.

Why do we need new advanced meters?
During the 20th century, meter technology did not experience many changes. The old mechanical meters were only capable of measuring kilowatt hours of energy used. Advanced meters provide energy utilities with information to manage electric service with greater efficiency and reliability.

How do advanced meters communicate?
Advanced meters communicate using a variety of methods. MCPU advanced meters will communicate via Radio Frequency (RF).
•RF meters use a radio signal in a selected frequency range to receive and transmit information. They are part of a mesh network where each meter acts as a router to transmit signals from other meters to and from energy utilities. RF meters transmit messages in a matter of milliseconds at power levels less than half of a Smartphones.

How do advanced meters benefit customers?
Advanced meters help energy utilities continue to provide safe and reliable energy service. With access to nearly real-time energy usage information, you can take control of your energy consumption and help save on your monthly bills. Since advanced meters work on the smart grid, power outage detection and notification is faster.

How do I know advanced meters are accurate?
Advanced meter technology has been thoroughly tested for accuracy and reliability by manufacturers, energy utilities and U.S. and Canada standards organizations. In fact, ongoing tests have shown that advanced meters are often more accurate than analog meters. Our advanced meters are built to the .2 percent accuracy class, which is the highest accuracy standard for electrical meters.

Do I own my electric meter?
No. Electric meters are owned, installed and maintained by MCPU. The meter base and service entrance cables are the customer's responsibility. A qualified electrician should make repairs to the meter base and service entrance cables to ensure the system provides safe and reliable service.

Is the advanced meter network secure?
Yes. Utilities are subject to standards developed by the National Institute of Standards and Technology and North American Electric Reliability Corporation (NERC) designed to ensure security of utility networks. The energy utility industry has extensive experience in maintaining cyber security on information systems essential to operate advanced meters. Protection begins at the meter itself. To prevent data breaches, information is encoded any time data is transmitted. We take all reasonable and necessary steps to ensure the services we provide use validated and proven security measures.

Are advanced meters a cause for health concerns?
Advanced meters and communication networks are certified to federal standards for safe and secure operation. As electrical devices with communication capabilities, advanced meters do emit energy. However, these emissions are well below the limits set by the Federal Communications Commission for safe operations. In fact, they have much lower emissions than many common household devices (ex. microwave ovens, cordless phones and internet routers).

Do advanced meters increase the risk of fire?
Advanced meters must meet National Electric Safety Code requirements and standards. They are also required to have independent certifications verifying their safety and heat resistance. Advanced meters are certified by Underwriter Laboratories, the leading product safety testing and certification organization, to failsafe in the event of an electrical shortage. In addition, the base plate of the meter is designed to withstand extreme temperatures (up to the melting point of copper).

How does advanced metering work with my natural gas meter?
Advanced metering for gas meters works by equipping your current gas meter with technology that allows it to automatically and remotely record and transmit your gas meter readings to MCPU via the same Radio Frequency as the electric meters.

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