

# Advanced Metering Safety



[snopud.com/connectup](http://snopud.com/connectup)

## Facts on Advanced Metering Safety

The PUD is deploying advanced metering technology and infrastructure through its Connect Up Program. This is safe and proven technology that has been deployed by utilities throughout the world for over two decades.



More than 50% of the utilities in the U.S. have installed this type of distribution system infrastructure and technology. In

the Pacific Northwest, 85% of utilities, including Seattle City Light, Puget Sound Energy, Tacoma Power and Avista, have installed these meter upgrades. Advanced metering infrastructure is safe and secure.



## How do advanced meters work?

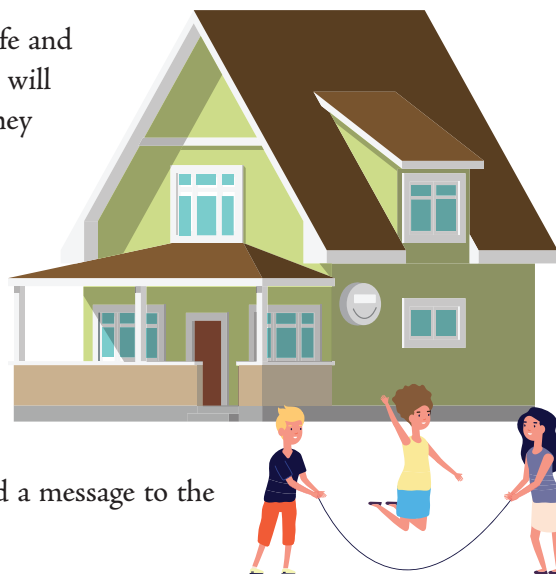
Advanced meters measure your usage throughout the day, much like your current analog or digital meter. What makes them different is that these meters transmit that data via radio frequency (RF), which is the same produced by other common household devices like cell phones, baby monitors and WiFi routers. The meters emit RF only when they transmit data, which is typically less than ten seconds per day.

## Safe for your home

Companies that manufacture advanced meters produce certifiably safe and reliable equipment. Sensus, the manufacturer of the meters the PUD will install through its Connect Up program, test their meters to ensure they meet safety requirements.

Advanced meters must meet safety requirements and standards spelled out in the National Electric Safety Code (NESC) and the meters built today are the safest of their kind. Public service commissions require independent certification proving that advanced meters are safe and show resistance to heat, fire, voltages, surges and self-heating.

Not only are these meters safe, but they have enhanced safety features built in. In the rare instance of a meter overheating, it can send a message to the utility and allow for a potential issue to be corrected.



## Safe for you

The World Health Organization (WHO) has concluded that no adverse health effects have been demonstrated to result from exposure to low-level radio frequency energy such as that produced by advanced meters.

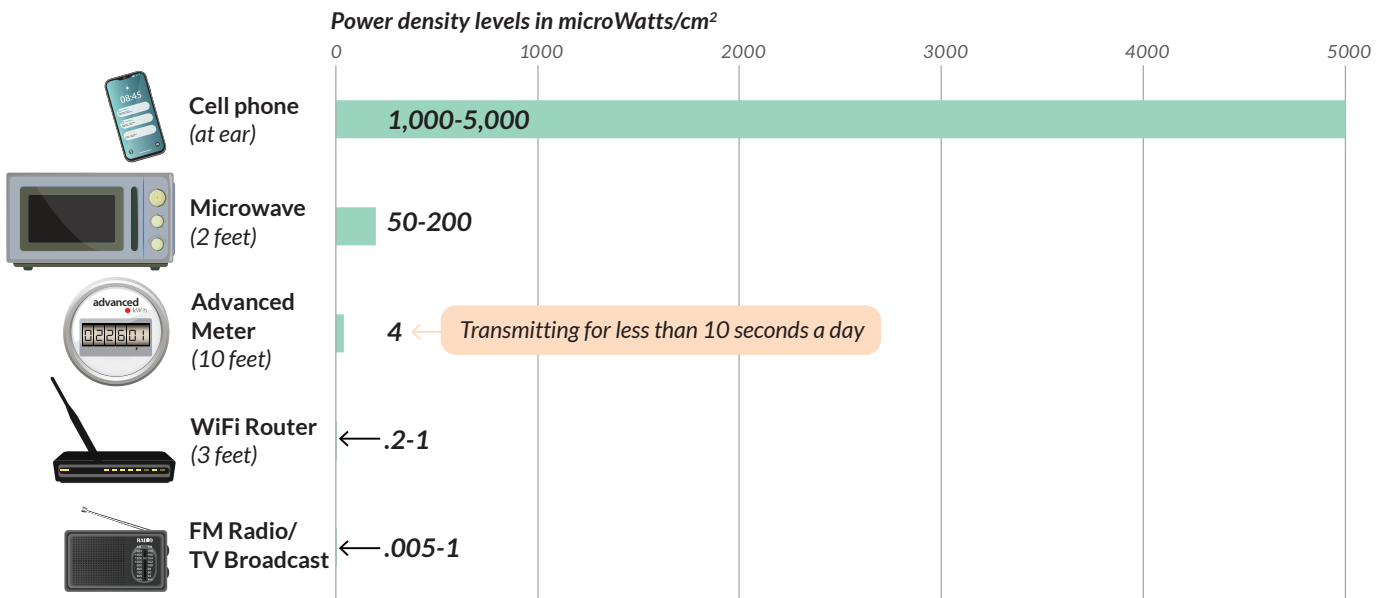
To further reduce concerns, advanced meters transmit RF energy only for short periods each day. They emit low levels of RF energy that is both FCC-approved and lower than the level of RF energy emitted by many other devices used daily by millions of people.



Radio-frequency emissions weaken significantly as the distance between you and the device increases. The casing of the meter and wall construction materials also decrease the level of RF energy in the vicinity. Standing in front of an advanced meter would result in the highest exposure a person could experience. Even then, the exposure would be approximately 70 times less than the FCC limits.



## Comparing radio frequency levels of meters to other common devices:



Data sources: Radio-frequency Exposure Levels from Smart Meters: A Case Study of One Model: <https://www.epri.com/research/products/1022270>

## Research

For more than 50 years, researchers have studied the potential health impacts of RF. That research has concluded that advanced meters do not result in adverse health impacts.

- World Health Organization: Electromagnetic Fields and Public Health: Base Stations and Wireless Technologies Backgrounder (2006). <https://www.who.int/teams/environment-climate-change-and-health/radiation-and-health/non-ionizing/base-stations-wireless-technologies>
- California Council of Science and Technology: California Council of Science and Technology (2011). Health Impacts of Radio Frequency Exposure from Smart Meters. <https://ccst.us/publications/2011/2011smart-final.pdf>
- Electric Power Research Institute (EPRI): Radio-Frequency Exposure Levels from Smart Meters: A Case Study of One Model (February 2011). <https://www.epri.com/research/products/1022270>