

# RF exposure comparison of Smart Meters to other commonly used devices

The use of radio frequencies (RF) in consumer products such as cellular phones and wireless routers has increased considerably over the past decade, and continues to increase. Although Smart Meters utilize RF technology, they present significantly lower RF exposure for consumers than many other products that are used daily without concern.

In the US, the FCC establishes the requirements for use of the RF spectrum and acceptable exposure limits for the public. Elster Smart Meters comply with and exceed these requirements, as well as international requirements set by global bodies. Typical exposures from Elster Smart Meters are well below the most conservative limits.

Smart Meters send information about electricity use to utilities by RF signals. The exposure from Smart Meters is much lower than other common sources for two reasons: 1) infrequent signal transmission, and 2) distance from the source.

## Why Smart Meters?

Smart Meters bring many benefits to consumers through operational efficiencies and enhanced service. A few examples of the many benefits are improved energy management, minimized utility visits to your home through remote meter reading and remote turn-on and turn-off capabilities, as well as improved outage response. Deferred generation and transmission capital expenditures for utilities will defer rate increases and provide for a cleaner environment, while benefits such as optional load control and new rate designs can help reduce costs during periods of peak demand.

## Typical Values\*

Smart Meter  
900 MHz radio



Baby Monitor  
7 x greater



Wii Remote Controller  
30 x greater



Nintendo DS with WiFi  
180 x greater



WiFi Access Point  
400 x greater



Cordless Phone  
1,000 x greater



Cell Phone  
1,000 - 10,000 x greater



\* Based on FCC 47CFR1.1310, which averages exposure over 30 minutes of usage. Comparative data provided by Elster.