

## Smart water meters

Busselton Water, like many other water utilities, is faced with the challenge of managing a finite water supply in an environment of high population growth and a drying climate impacted by climate change.

To effectively manage our water supply, we seek out new and innovative technologies that can offer better and more efficient ways of doing business.

We also strive to learn more about our customers' water consumption – because the more we know, the better we can plan for the future and conserve our precious water resources for future generations.

Smart meters – or radio frequency meters – are an important part of our approach.

Smart meters are an innovation which has been adopted around the world. They offer considerable benefits for both consumers and organisations alike, including Busselton Water.

For Busselton Water, smart meters are a key part of our Intelligent Water Network. We were the first utility in Australia to fully employ Itron's innovative smart radio frequency meters. Properties served by Busselton Water have had their water consumption measured by a radio frequency smart meter since 2006.

Smart meters enable us to understand our customers' water use patterns, more accurately detect leaks, and make it faster and easier for us to read meters. The latest models of smart meters can enable us to advise customers about a leak on their property within one or two days of the leak starting. Similarly, smart meters play a critical part in detecting leaks in our pipeline network before they become visible at ground level. Combined, this creates a more efficient water system and means we can manage the region's water supply more effectively.

Critically, smart meters also communicate with our plant control systems and GPS asset mapping capabilities which collect data from water assets in the field, helping us to plan for future growth.

### FREQUENTLY ASKED QUESTIONS

#### What is a smart water meter?

A smart meter – also known as advanced metering infrastructure or Radio Frequency (RF) meter – is a water meter that is connected to a data logger, which allows water consumption to be measured, stored and periodically sent to a water provider.



#### How long has Busselton Water been using smart meters?

Busselton Water commenced installation of Radio Frequency (RF) meters in 2006. Today, all Busselton Water customers use smart meters.

#### How do they work?

Smart meters differ from traditional meters in that they are electronic and can 'talk' to a central computer system. To do this, the information collected by the smart meter is periodically sent to this central system using short bursts of radio waves or low level radio frequency electromagnetic energy (EME).

For Busselton Water, this occurs for less than one minute, once every four months when we read customer water meters. At all other times, the meters lay dormant.

On occasions, we may trial newer models of water meters that become available. These may transmit short bursts of radio waves more frequently, but still for only very short periods (i.e. for less than one minute, once a day).

#### Where is my smart meter located?

A smart meter is always located outside the home, either in place of or as part of an existing water meter.

#### How do I know if my meter is a smart meter?

Every home and business in the Busselton Water catchment has a smart meter installed, so if you are a Busselton Water customer, your water meter is a smart meter.



### Are smart meters safe?

Yes. Smart meters are manufactured and installed according to Australian Standards and Busselton Water is confident that smart meters pose no significant health and safety risks.

All smart meters must comply with the electromagnetic exposure limits set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). The same limits apply to other household and personal devices such as mobile phones, laptops, routers and baby monitors.

### Who regulates the emissions from smart meters?

Emissions from smart meters (and other wireless devices used for communication) are regulated by the Australian Communications and Media Authority (ACMA).

### Does it cost me more to have a smart meter on my property?

No. We do not charge our customers any additional fees for the use of smart meters. In fact, over time, we anticipate that the use of improved smart meter technology will lead to greater efficiencies and cost savings for our business and our customers.

### Why does Busselton Water use smart meters?

Smart meters can provide a range of information that traditional meters simply cannot. This might include water temperature, flow, pressure and a range of other water use information. The better we understand water use patterns, the more effectively we can manage the water network.

Importantly, smart meters can also assist in detecting water leaks in our pipe network or within our customers' plumbing. This leak detection saves water and energy and reduces the risk of high water bills resulting from a leak.

Smart meters can also be read remotely without the need for a Busselton Water representative to step foot on your property. By using these advanced meters, our meter reading personnel no longer have to walk up and down each street and can instead receive the data wirelessly – meaning greater efficiencies and cost savings to our customers.

This also offers greater accessibility to all meters even if our customer is absent or the meter is located in a hard-to-read location.

### What research has been done about smart meters and where can I find out more?

Health authorities around the world, including ARPANSA and the World Health Organisation, have examined scientific evidence regarding the use of smart meters and there is a wealth of information available. Some of this information is provided below:

[ARPANSA Fact Sheet – 'Smart Meters and Health'](#)

[Itron – Radio Frequency Emissions: Analysis of Radio Frequency Exposure Associated with Itron GenX Advanced Metering Devices](#)

[American Cancer Society – 'Smart Meters'](#)