

# Realize your potential with FlexNet.

Communities—and citizens—around the globe want smarter utilities that provide improved safety, efficiency and sustainability.

But smart utilities require the right communication network to enable all their potential benefits.

Do you know how to choose the best network?

## Here are the top four features to consider.



### Spectrum

Is it private  and FCC licensed?

Are you competing with other devices to deliver  your data?

**FlexNet is the only FCC private-licensed spectrum network** dedicated to transmitting critical utility data interference-free. It's your data—and only your data.

**Mesh** is an unlicensed, shared spectrum network crowded with noise from outside devices like baby monitors and microwaves.

**LoRa** is an unlicensed spectrum network for transmitting data from sensors, but it is not built for utilities.

**NB-IoT** is a shared, public carrier network designed for data coming from low-power sensors.

**Cellular** is a licensed, public carrier network that is shared with others to accommodate billions of apps—not utility data alone.



### Bandwidth

Can it handle ever-increasing  volumes of utility data? Can the system support expansion  and new applications?

**FlexNet is scalable and upgradable.**

One network can be securely used for multiple utility applications. Each application has a dedicated channel to prioritize applications and critical messages.

**Mesh** shares all applications across a single channel, and investments in CapEx and OpEx are needed to grow the network.


**LoRa** is an ultra-narrowband spectrum with only one channel. As traffic increases on the network, range decreases.

**NB-IoT** is architected for low-power sensors and is not a utility-grade network. SLAs (Service Level Agreements) are not available to guarantee coverage.

**Cellular** networks need to be upgraded as technology improves. With each new leap in performance, assets are stranded and costs are passed to the utility.



### Reliability

Can you count on it in an  emergency?

Will the system effectively support  power restoration efforts?

**FlexNet accurately pinpoints outages** for faster recovery and enables efficient allocation of resources, time and money.

**Mesh** takes hours to reform post-outage, and the network view is incomplete. Where will you deploy first?

**LoRa** has a long range but very low transmission power. Battery life can drop rapidly based on higher data rates and channel loading.

**NB-IoT** is not designed for extensive battery life. Endpoint devices are rated for only ten years.

**Cellular** dead zones in the network affect your data, too. Coverage isn't guaranteed.



### Security

Does the network  provide protection from security breaches?

Is it  hack-proof?

**FlexNet is secure, providing AES 256-bit encrypted data.**

Across **mesh, NB-IoT and LoRa**, consumer data can be transmitted to or received by non-secured points via shared spectrum.

Even though a **cellular** network is licensed, it's not licensed specifically for utilities—which leaves opportunities for security breaches.

## The right choice brings smart results.

#### Smart Water

- Conduct on-demand meter reads and turn service on/off remotely
- Remotely manage and control applications in near real-time

#### Smart Grid

- Restore power faster and improve public safety
- Manage grid assets and reduce maintenance costs
- Conserve energy and reduce system demand

#### Smart Gas

- Turn off gas remotely
- Monitor and control pressure from anywhere
- Ensure accuracy and reliability

#### Smart Lighting

- Reduce energy and maintenance costs
- Enhance customer service
- Jump-start economic development

Sensus FlexNet® is the smart communications network that lets you say **"Yes."**

Realize the possibilities with FlexNet.

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