FlexNet: Redefining Smart City Communications

Building smart cities takes technology and networking solutions with in-depth views and infrastructure control. The Sensus FlexNet® communication network is a long-range radio network that provides scalable and reliable two-way infrastructure. The system receives data not only around customer usage, but also from meters and other sensors that assist in optimizing the operation of electric, water, gas, and outdoor lighting systems to reduce costs and improve safety and customer satisfaction.

When compared to mesh, FlexNet has fewer points of failure and utilizes hardened network infrastructure. Redundancy is built into the network topology for proactive management, and unlike costly power line infrastructures or low-powered, shared radio frequencies, FlexNet offers primary use radio spectrum (protected by law from interference.) We bundle the spectrum into our network solution to deliver better performance to you—and your customers.

Smart City Ecosystem
Features

- The highest signal power and range in the industry: Transmit at up to two watts (10 - 1000X more power than devices on unlicensed spectrum), and up to 40 miles from point to point.
- Consistent, quality communications: A dedicated highway for data transmission makes communication more reliable than systems requiring channel-hopping.
- Large geographical footprint: FlexNet operates on 900MHz spectrum owned by Sensus, which carries inventory to support future data requirements.
- Extensive device Support: FlexNet supports a wide variety of devices and meters—even if battery powered, which can be problematic in mesh networks.

Benefits

- Improve operational efficiencies and quickly identify leaks, tampering, equipment issues, outages, or other abnormalities using collected customer data.
- Update/upgrade SmartPoint® modules remotely, conduct on-demand readings, and disconnect/connect devices.
- Integrate current systems and easily add new services and solutions to create a multi-application network.
- Reduce infrastructure costs and strengthen network performance by leveraging a point-to-multipoint design and tower-based architecture for redundancy.
- Leverage open standards and APIs to easily interface with third-party applications and platforms.
- Ensure accurate billing and help customers to better understand usage behavior.