



POWERFUL PARKING PERFORMANCE DATA

SPS-X - Wireless Smart Parking Sensor

Real-Time Guidance, Stall Usage Data Collection, Actionable Analytics

True smart parking starts at the stall and eleven-x's innovative wireless SPS-X sensor detects and monitors stall occupancy in real-time and provides data and actionable insights that enables evidence-driven planning and programs.

The SPS-X smart parking sensor is an innovative patent-pending LoRaWAN®-based device that utilizes multiple technologies including magnetic sensing, radar, Bluetooth and AI that provides:

- Real-time stall occupancy status and monitoring
- Industry leading accuracy based on multiple sensing technologies backed by advanced AI
- Designed and engineered for maximum reliability and robustness
- Leverages standards-based low power wireless technology
- Ultra-long battery life
- Enables a variety of key analytics and insights
- Easy deployment and integration with other technologies
- Integrated device management
- Lowest cost per stall

Thinking of deploying in harsh outdoor environments? No problem, the SPS-X utilizes multiple technologies to maintain its industry leading accuracy and reliability in winter conditions, and filters out negative influencers such as buried metal, electromagnetic interference and other factors for the most reliable and accurate stall monitoring.

The SPS-X comes with an easy-to-use web app that enables easy deployment, sensor calibration and insights, making installation and daily management stress-free. Add additional sensors at any time in minutes.

SPS-X BENEFITS:

- Real-time stall monitoring
- Ultra-long life (think up to 10 years, not 3)
- Industry-leading accuracy
- Unsurpassed reliability
- Based on low power LoRaWAN technology for always on detection and power saving communications
- Lowest cost per stall price point:
 - Cost-effective sensor
 - Near-zero maintenance
 - Low connectivity fees
- Actionable analytics
- Easy sensor management
- Simple installation process
- Easy integration with other technologies



TECHNICAL SPECIFICATIONS

Communications

Communication Protocol	LoRaWAN® 1.02 BLE (Bluetooth Low Energy)
Device Class	Class A
Frequency	North American Standard: 902-928 MHz
Transmit Power	Up to 20dBm

Mechanical

Enclosure	Ruggedized enclosure
Antenna	Internal
Ingress Rating	IP67 - waterproof dustproof
Mounting	Indoor or outdoor
Weight	576g (1.27lbs)

Security

AES-128 encryption (end-to-end)
Tamper Detection

Provisioning

Secured key injection and key exchange
Key management with join server
NFC provisioning support [optional]
Infield or back office secure provisioning
Smart phone app for rapid provisioning

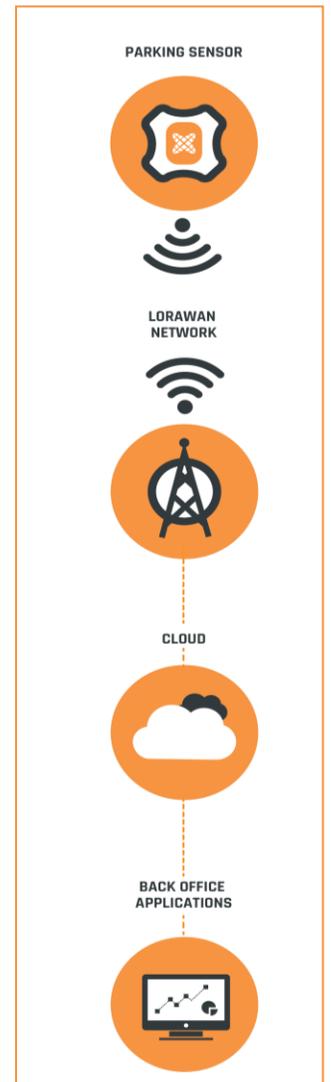
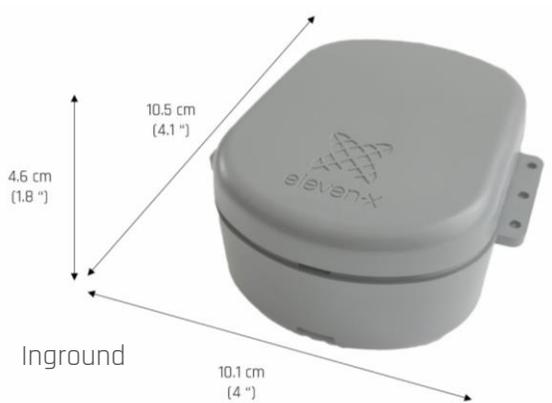
Environments

Operating Temperature	-40°C to 85°C
Battery Life	Up to 10 years
Battery Parameters	3.6V, 19,000mAh
Humidity	0% - 100%

Certifications

FCC Part 15.247
ISED RSS-247

*Specifications subject to change



FOR MORE INFORMATION: web: www.eleven-x.com | email: collaborate@eleven-x.com