



# Smart Parking

LoRa® APPLICATION BRIEF

## DESCRIPTION

Up to 30% of traffic congestion in urban areas is linked to drivers circling to find parking space. By implementing a smart parking solution comprised of sensors and gateways embedded with LoRa® Technology and an intelligent low-power, wide area network based on the LoRaWAN™ protocol, cities can help improve traffic in urban centers, reduce unnecessary pollution and increase city revenue.

## HOW IT WORKS

One Sense ParkAware™ Technology enables connectivity, real-time analytics, reporting, and additional functions such as geo-location.

- 1 Sensors embedded with LoRa Technology are placed in parking spots throughout the city.
- 2 Sensors send status of parking spaces available to a gateway.
- 3 Gateway sends information to the network where the data is analyzed by an application server.
- 4 Application server provides open spot parking information to parking garages or drivers via computer or mobile device.

## BENEFITS

- Increase revenue for cities using a sensor-based system to identify and ticket parking violations and adapt pricing on city meters based on demand.
- Reduce city congestion by using sensors and gateways embedded with LoRa Technology to let drivers know where to find open parking.
- Easy to set up since battery-operated sensors do not need to be connected to a power source — an entire structure can be equipped in less than a day.
- Keeps maintenance costs low as low power operation ensures sensor batteries can last up to 10 years.
- Reliable RF communication link between sensing infrastructure and LoRaWAN-based network provides excellent coverage, including underground parking garages.



To learn more, please visit:  
[www.parkaware.io](http://www.parkaware.io)

