

v. 1.0.0
DATASHEET

PARKING SENSOR



Born to be smart

Urbana Parking Sensor is a smart sensor which combines dual Geo-magnetic sensor and millimeter-wave radar technologies. A detection algorithm allows the technologies to provide one of the most advanced Parking Detection device in the market. Through heat resistant coating and robust enclosures, Urbana Parking Sensor enables long-lasting, compact solutions for the parking monitoring. Bridging the gap between accuracy and durability, the device is made to last up to 4

years.

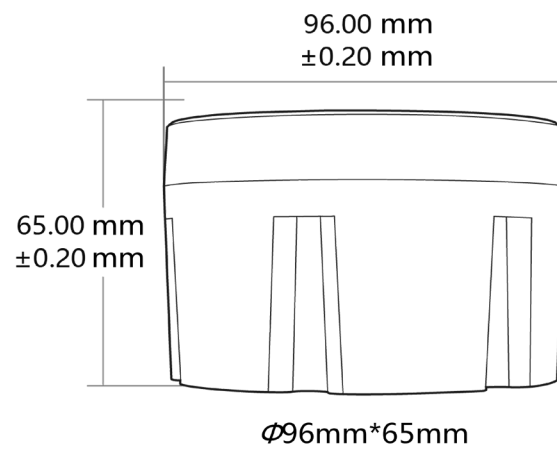
Urbana Parking Sensor is a plug-and-play solution, with LoRaWAN® network communication and open protocol. Urbana enables easy integration with various Smart City or Smart Building IoT systems, app's or with our Urbana IoT Efficiency Platform.

Ultimate technology for network connectivity.

The device deploys LoRa® radio technology for last mile communication. This innovative low-power and long-range technology is used by the

Gateway for communicating with Urbana Sensor. It operates under LoRaWAN® Class A protocol with coverage radius up to 5 Km. LoRa® technology provides the best performances for radio communication in terms of reliability, scalability and obstacles penetration with low power consumption.

DEVICE DIMENSION



TECHNICAL SPECIFICATION

MECHANICAL

Housing:	Solid Case
Material:	Plastic
Dimension:	ø 96 x 65 mm
Installation:	In-Ground
Load Bearing:	10 Tons

ELECTRICAL

Power:	3.6V/19Ah Li-SOCL2 Battery
Idle Current:	≤ 15 uA
Working Current:	≤ 125 mA
Rx Current:	≤ 15 mA

ENVIROMENTAL

Temperature Range:	- 40°C ~ + 80°C
IP Rating:	IP67

AVERAGE LIFETIME

Life Cycle:	4 years (based on occupied change 20 times per day)
--------------------	---

INTERFACES AND PROTOCOLS

Radio Interface:	LoRa®
Protocol:	LoRaWAN®

TECHNOLOGY DETECTION

Sensor:	Three-axis magnetic
Radar:	Millimeter-wave radar
Accuracy:	> 98%

CONFIGURATION

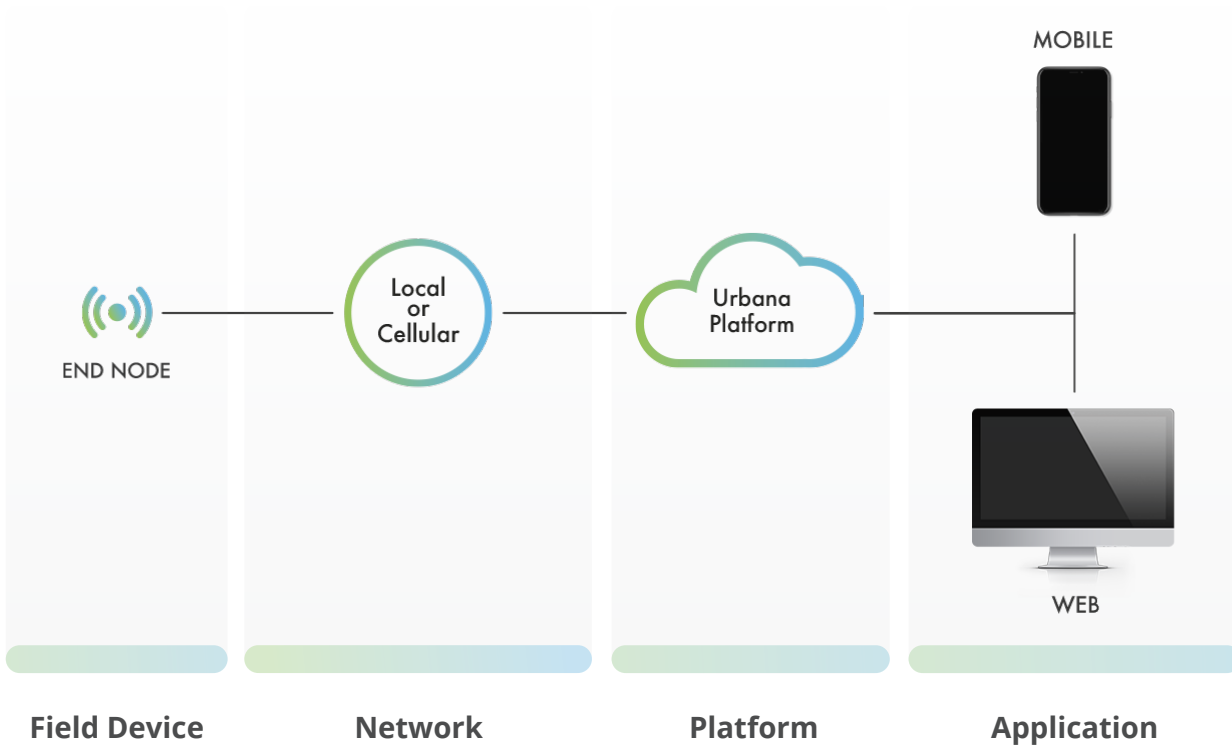
Plug&Play using Toolkit App

LORAWAN® INTERFACE

Frequency Region:	EU868
Modulation:	LoRa®
Stack:	LoRaWAN® 1.0.2 Regional Parameters
RF Data Rate:	0.24 to 37.5 kbps
RF Range:	Up to 1000 m (line of sight)

URBANA IoT PLATFORM

Urbana platform is designed to provide end-to-end IoT solutions from hardware to software. The core structure of the platform is based on a scalable distributed and containerised infrastructure maintaining the requirements of clients to scale up whenever needed. The tech stack used in Urbana allows us to have no restriction based on number of devices, features, users and availability. With use of these highly scalable and available databases, Urbana IoT Platform is able to provide advanced reporting and fallback mechanism to provide high level of reliability. One of the most important components of the Urbana IoT Platform is the MQTT broker (server). The MQTT layer is the gate that connects the cloud-based part of the infrastructure to the local field network of devices. It plays a critical role both in terms of security and scalability but also in terms of interoperability. Urbana infrastructure can interface with any device compliant with LoRaWAN[®] network protocol as standardized by the LoRa Alliance[®]. Urbana Smart Solutions, being an end-to-end provider, have in-house LoRaWAN[®] gateways readily for the clients if needed, which are Plug&Play compliant with all the Urbana devices.



PK11 Sensor
Datasheet

CONTACT US

info@urbanasmart.com
urbanasmart.com

EUROPE

Italy
Via Bruno Maderna 7
30174 Mestre
Venice - Italy
Tel. +39 041 2689294

ASIA

Singapore
6 Shenton Way # 22-00 OUE
Downtown 068809
Tel : (+65) 6562255055
Fax : (+65) 6562255303