

AIOT SOLUTIONS FOR URBAN MOBILITY MANAGEMENT

WE CONTRIBUTE TO MORE SUSTAINABLE MOBILITY WITH OUR SOLUTIONS FOR THE DIGITISATION OF PARKING AND MOBILITY MANAGEMENT

We are experts in IoT and Artificial Intelligence, and leaders in smart parking.

Cities are facing problems of overpopulation and high levels of pollution, and are forced to take urgent measures to decarbonise and improve citizens' quality of life.



The transition to decarbonisation brings significant challenges for parking and mobility managers:

- Less on-street parking and focusing on reserved uses such as loading, PRM or EV recharging.
- Indiscipline is growing in regulated parking, which requires more effective enforcement.
- The use of Park&Ride zones should be promoted to encourage inter-modality and other forms of transport.
- Information on parking and mobility options is necessary to promote local trade and citizens' mobility.

Cities need to digitise in order to effectively manage the challenges of transformation.









Data collection

Wireless sensors and/or video analytics using Artificial Intelligence for reliable detection in any scenario

loT Connectivity

Connectivity adapted for customer use

Guidance and control

Software, displays and applications for all parking issues

Chaos, traffic, pollution and dissatisfaction

Cities are changing

·More green spaces
·Restrictions on the
use of private vehicles
·Promotion of
sustainable transport
means and
multimodality

Real-time information

of regulated parking spaces

Data-driven planning and management

faslprk



INFORMS DRIVERS OF PARKING OCCUPANCY TO REDUCE AGITATION TRAFFIC

The Smart Parking guidance solution detects the presence of vehicles in spaces and areas to be monitored and transmits the information to drivers through variable message signs and guidance APPs. The information is kept constantly up-to-date and displayed to users simply and intuitively.

Benefits

- It optimises car park use by informing on location, regulation and availability
- ► It reduces congestion and emissions by directing users and promoting multi-modal mobility
- lt improves user and citizen satisfaction

parkcirl



OPTIMISED ON-STREET PARKING CONTROL OPERATION

The On-Street Smart Parking control solution detects if the vehicles are correctly parked according to City regulations. Whenever a violation is detected (payment default, maximum time exceeded, unauthorized user), the agent is immediately notified and can check and fine the offender.

Benefits

- ▶ It reduces indiscipline in regulated parking places
- ▶ It increases rotation in pay-by-space or time-limited spaces
- ▶ It facilitates accessibility for PRM users
- ▶ It improves parking availability for deliveries
- ▶ It reduces indiscipline and agitation traffic

URBAN



PARK & RIDE



CORPORATE



SHOPPING CENTRES



TRUCKS

PAY-BY-SPACE



FREE TIME LIMITED



REDUCED MOBILITY

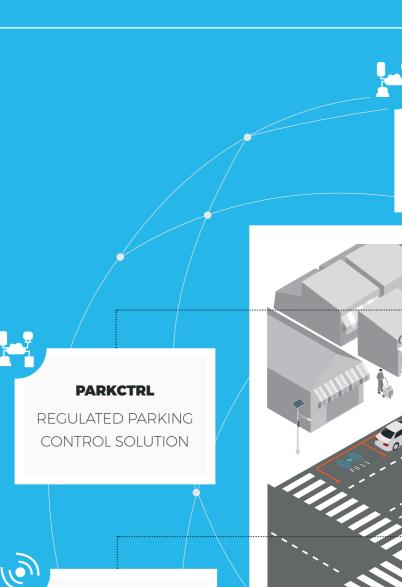


LOADING



ELECTRIC VEHICLES





PARKTIME

APP FOR USERS OF RESERVED SPACES

U-ADMIN

SMART MOBILITY MANAGEMENT PLATFORM

U-FLOW VISIO

ENTRANCE AND EXIT COUNTING DETECTION SOFTWARE USING ARTI-FICIAL INTELLIGENCE

U-DISPLAY

GUIDANCE VARIABLE MESSAGE SIGN

GUIDANCE APP

CUSTOMISABLE APP FOR DRIVER GUIDANCE

SINGLE SPACE DETECTION GROUND SENSOR

U-SPOT









U-SPOT VISIO

SINGLE SPACE DETECTION SOFTWARE USING ARTIFICIAL INTELLIGENCE

We continue innovating in our product range, adapting to market demands and technological disruptions, in order to meet all the needs of smart parking.

VEHICLE DETECTION

DETECTION SYSTEMS USING IOT SENSORS

Parking occupancy detection using wireless and autonomous flush mount magnetic sensors

Parking occupancy detection with wireless, fully autonomous magnetic sensors — available in flush-mounted or surface-mounted versions.



U-SPOT IOT SENSORS FOR SINGLE SPACE DETECTION

Single space sensors allow the detection of the arrival, presence and departure of vehicles in any parking space. It can be used for guidance

and on-street control solutions.

The sensors provide real-time presence, and departure in this valuable data not only (every parking space uides drivers to available spots onitoring and ensures compliance pending on the project's needs, not only (fective m The highest accuracy in parkingut also enables et with parking regula sensors can be ins ons. De



- Resistant to all weather conditions
- Invisible, anti-vandalism. Allows snow clearing
- Cloud based detections
- >10 year lifetime with 15 daily parking sessions
- ▶ Allows installing on curb or sidewalk without removing cars
- Filtering of magnetic perturbations
- Easy installation and maintenance
- LoraWAN or NB-IoT connectivity
- Magnetic, wireless and autonomous



SINGLE SPACE DETECTION

U-SPOT VISIO

Used to acquire single space information of an area, covering a larger number of spots with a single camera. It works with the usual cameras available on the market, with no need for dedicated hardware.

- Monitors up to 50 spots with a single device
- Accuracy >99%

DETECTION SYSTEMS USING ARTIFICIAL INTELLIGENCE

Software based on the processing of images captured in real time by compatible cameras,

using artificial intelligence and deep learning.

- Works in any usual weather conditions
- ► GDPR-compliant





U-FLOW VISIO VEHICLE FLOW DETECTION

Designed for car parks with entrances and exits, and with the possibility of installing cameras nearby. The free spaces are updated when a car enters or leaves the car park. It works with cameras compatible with U-admin.

- ► The best reliability on the market
- ➤ Reliability +99%
- ▶ Resistant to all normal weather conditions
- ► GDPR compliant



MUCH MORE THAN DETECTION

U-Admin is a modular software platform designed to cover the needs of each customer efficiently, from device management to analytics and complete on-street control. U-Admin can be used to centralise parking information from other technologies and can be easily integrated with third party systems.

▶ Payment and user declaration means

Manage **Urbiotica devices**

- > System installation and maintenance
- ► Subscription to technical incidence notifications

open, integrable platform

Integrate detection systems from other manufacturers ► External parking systems > Sensing systems from other manufacturers

U-Admin API: work with an

- ▶ PULL and PUSH API
- ► Standard integration protocols
- ► Technical and business information

Fastprk: provide information on parking and mobility

11

- ► Guidance APPs and Variable Message Signs management
- ► Configuration of information displayed to users

Advanced analytics: plans based on data

- ► Analyse both real time and historical parking information (occupancy, rotations, vehicles flow, alerts)
- ▶ Multiple chart formats and precalculated indicators



U-ADMIN

Smart Parking Platform

ParkCtrl: manage curbside enforcement

- ▶ Parking offence alerts for payment default, maximum time exceeded and unauthorised user
- ▶ ParkTime APP for the users of reserved parking spaces
- ► ParkCTRL APP for the guards

FASTPRK PRODUCTS

TAILOR-MADE GUIDANCE SIGNS AND APPS

U-DISPLAY



U-Display allows for driver guidance on arrival at the parking area, informing them of free spaces. Thanks to its numerical or alphanumeric LED modules and customised design, U-Display offers a simple and flexible way of implementing an efficient parking guidance solution for both urban and private environments.



PARKING GUIDANCE APP

The customisable **parking guidance APP** is the perfect complement for your guidance project, indicating where users will find a free parking space quickly.

PARKCTRL PRODUCTS

COMPLETE REGULATED PARKING ENFORCEMENT SOLUTION

Automatically identify any type of parking violation, reduce control costs and consequently encourage compliance with regulations.



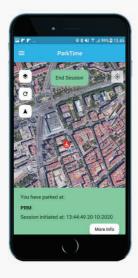
ALERT ENGINE

Identify parking violations (payment default, maximum time exceeded, unauthorised user) as per local regulations.

PARKCTRL

ParkCTRL is the APP for agents in charge of field parking enforcement. By quickly identifying on-street parking violations, whether payment default, exceeding time or unauthorised users, their daily workload is streamlined and made more efficient. ParkCTRL includes an optional module to print the penalty notice handed to the offender.

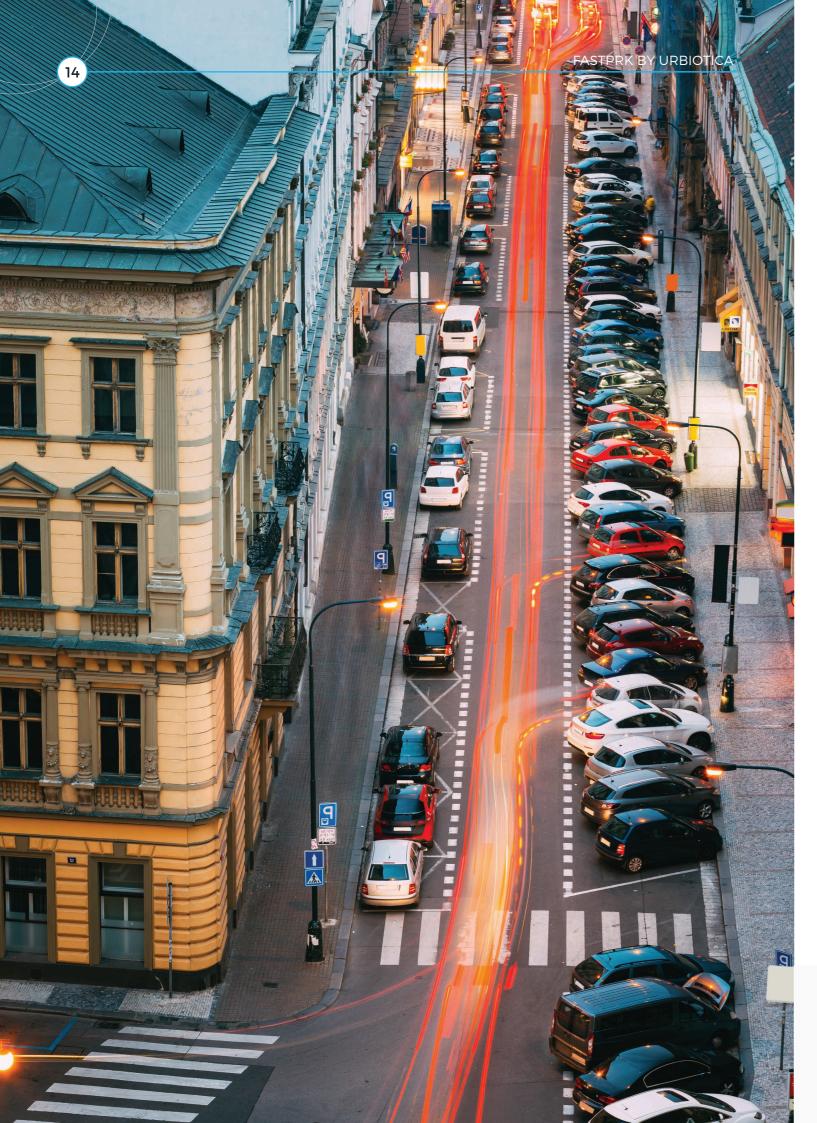




PARKTIME

ParkTime is the APP dedicated to parking spaces reserved for specific users where the authorised persons will consult the availability in real time and announce their arrival:

- · People with reduced mobility
- · Loading and unloading areas
- · Electric vehicles charging spaces
- · Free and time limited parking



WHY DO FASTPRK STAND OUT

For more than 15 years, **Urbiotica** has been a key player in the Smart Parking market. Thanks to our experience, we have been able to develop specific know-how and have designed products adapted to most requirements in these areas. Our customers especially highlight:



END-TO-END SOLUTIONS

- · From sensing to guidance and enforcement
- · Integrated signs and APPs
- · Adapted for all outdoor parking situations



FLEXIBLE & MODULAR

- · Single space detection and counting sensors
- · IOT magnetic sensors + vision with artificial intelligence
- · Various connectivity options
- · Tailor-made signs and guidance APP
- · Easy integrations with third-party systems (including other sensing systems)



RELIABLE & ACCURATE

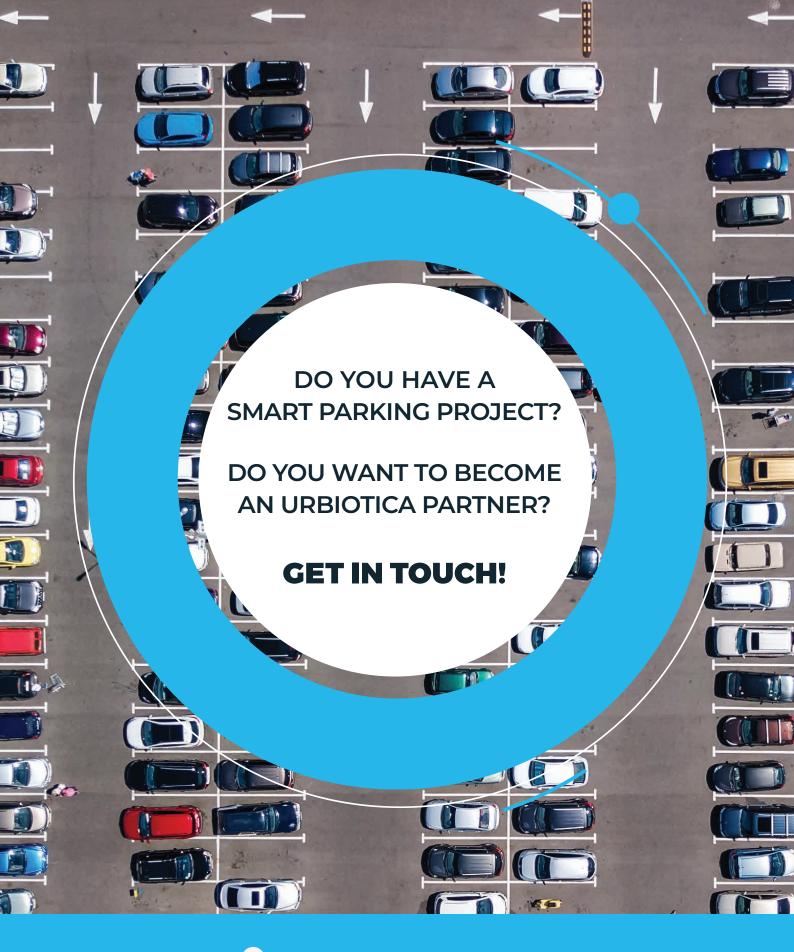
- · Weatherproof
- · Automatic, continuous sensors calibration
- · Robust hardware devices and software platforms
- · Highly renowned field and remote support services

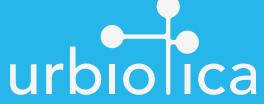


COST-EFFECTIVE

- · Long lifetime for all devices
- · Easy and quick installation without removing vehicles
- · No maintenance
- · No extra integration costs

Urbiotica and its network of partners have successfully deployed the technology for more than 15 years worldwide. By 2023, we will have a total of **100.000 sensors installed** in more than **250 projects**, currently present in **50 countries** and spread across 4 continents. We have gathered unique expertise to offer you the best of our smart parking solutions.







C/ Guitard, 43 08014 Barcelona



Phone: +34 931 69 17 31



E-mail: info@urbiotica.com