

navigation / management / control of parking spaces





## DISPLAYING



## ANTIK parking sensor detects the availability of parking lot

and sends the information via the ANTIK IoT network to the server.

TARIFF ZONES AND PAYMENTS

Two-way communication allows to pay for parking according to the tariff, that may vary in a given location. In the mobile application it is possible for example to pay for parking in simple step.



Surface-mounted parking sensors

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are suitable for example for parking houses and interior parking lots.

#### **Underground parking sensors**

are suitable for exterior parking. Sensor is placed bellow the ground and does not interfere with for example winter maintenance.

## Recognition of LICENCE PLATE Better CONTROL

### In combination with cameras system

with video analysis and licence plate recognition feature or thanks to direct communication of **parking "token"** in the vehicle.





 AVIGATION TO AVAILABLE PARKING LOT

 on Antik Smart DS panels e.g.

 on a street light pillar.

#### Checking the length of prepaid parking time.

**Notification** of e.g. municipal police in the case of unauthorized parking or standing in a restricted area.



**SMART parking** represents the information system about ambient parking. Parking is perceived from the perspective of one parking lot. User (driver) is provided with an information about the occupation of ambient parking lots as well as brings all the information about parking restrictions and parking policy in the area in a simplified form.



# PARKING SENSORS

ANTIK



**ANTIK LORAWAN parking sensor surface-mounted** allows citizens and municipalities to detect occupancy of specific parking lots. Sensor continuously monitors status of parking lot using sensitive geomagnetic sensor. The occupancy change is immediately transmitted to the master system. Device is easy to install by mounting it on the surface of the parking lot and fastening two screws in the dowels.

This solution is suitable to use mainly in interior parking lots or in the areas, where summer or winter maintenance is not necessary. Device can be optionally equipped with data transfer via NB-IoT network or LoRaWAN.





Surface-mounted and underground versions of sensors



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ANTIK offers patented **Antik LoRaWan underground parking sensor** that allows the citizens and municipalities to detect occupancy of specific parking lots. Device continuously monitors status of parking lot using sensitive geomagnetic sensor. The occupancy change is immediately transmitted to the master system.

Device is installed to the drilled hole with 40 mm diameter and 120 mm depth. This solution is suitable mainly for outdoor parking lots as it does not pose any restriction for winter maintenance.



## PARKING SYSTEMS

**ANTIK brings unique Smart parking systems** known not only from world metropolises. Additionally, turnkey solution including smart part of parking ecosystem is now in affordable price.

Parking sensor in combination with cameras system with video analysis to recognize the license plates is resulting to very **smart parking house or smart parking lot outside on the street.** 

For the user there is a navigation to available parking lot directly from the street, e.g. via digital panels on street light pillar or via mobile application.

Monitoring of correct parking and utilization is done by data processing on Cloud server and according to various rules. Additionally, it sends a notification in case of e. g. **extending of prepaid parking time**, **occupancy of parking lots, incorrect parking control (parking sensor located underground on problematic location e. g. where there is no standing sign or parking lot for the disabled).** 





LoRa



## OF INCORRECT PARKING

Parking sensor sends information about status: Parked/Not parked vehicle.

**Consequently, logical rules in the system** background determine various conditions as:

How long can be vehicle parked? If the parking fee is paid. Is vehicle parking on problematic space? E.g. parking where no standing sign is.

**Is parking lot available?** If yes, it can be the part of navigation for other drivers to find that available lot, e. g. on informational digital panels or in the mobile application.

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# NAVALABLE PARKING

Antik Charging stations as effective option to display available parking lots on the street.

Thanks to compatibility of Antik Smart City products, endless applications are created.

Why should only advertising lights on the street?



CHARGING STATION6 AUG 2019STATUS: PRIPOJENÉ A NABÍJA SA87%0,30€



300m 3 AVAILABLE







## CAMERAS SYSTEMS WITH VIDEO ANALYSIS

SK PD<sup>...</sup> 328 SC

## Static transport under control

- / Incorrect parking, parking in restricted area
- / Number of parking lots vs. parking occupancy
- / Navigation systems for parking space
- / Parking barriers
- / License plate recognition
- / Parking sensors
- / LED navigation boards



# ANTIK BUSINESS PARTNER COOPERATION



Are you planning to build or upgrade parking lots with smart features? **Do not hesitate to contact us.** 







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