

# O Cleverciti S y s t e m s

Revolutionary sensor technology for on-street parking, P&R and private parking areas.



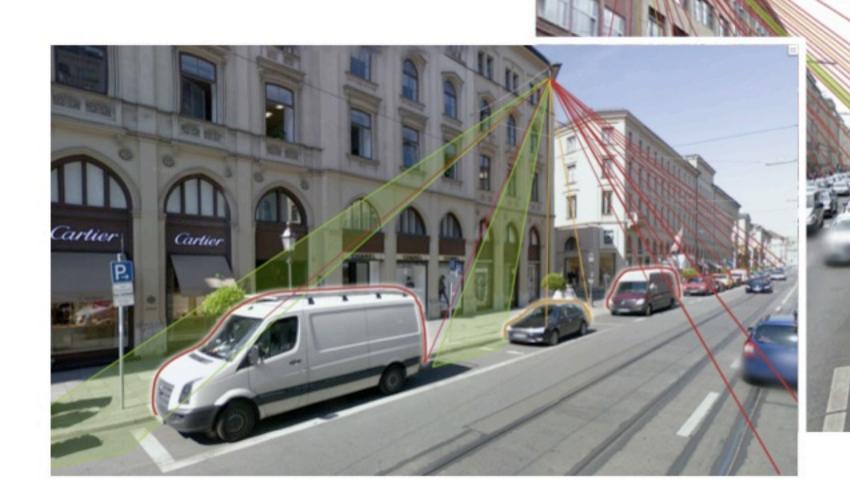
## 1. Cleverciti Technology





#### 1. Cleverciti Sensors

Sensors analyse, identify and measure the size of occupied and free parking spaces







#### 1. Cleverciti Sensors

#### **Facts and Figures**

- Precision of 0,0005 degrees
- Complete data analysis and data processing inside the sensor
- Fast and easy installation on building facades, masts or lamp poles without requiring roadworks
- Reliable performance under temperature or light changes
- Compensation of wind and vibration
- M2M and Wifi data transmission
- Onboard octagore processing



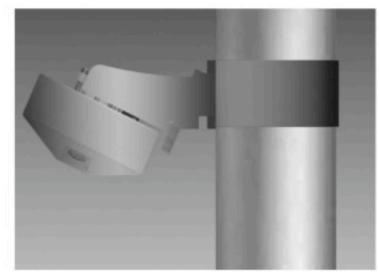


#### 1. Cleverciti Sensors



# Cleverciti Parking Sensor LR7100

- dedicated to large on-street parking areas and surface parking lots
- → 30 to 100+ parking spaces per sensor
- Reach: 15 to 400 meters
- Remote adjusting with high precision remote control head



# Cleverciti Parking Sensor NF5640-120

- dedicated to lamp poles and on-street parking
- → 16 to 30+ parking spaces per sensor
- Reach: 6 to 100 meters





#### 1. Cleverciti Near Field Sensor



Integrated

# **CLEVERCITI SENSOR**

for up to 25 parking spaces





#### 1. Cleverciti Sensor LR7100 at Bad Hersfeld, Germany





# Bad Hersfeld Marketplace

One of the busiest parking spaces in Germany

- up to 5000 parking events/day
- 5 Cleverciti Sensors for the whole marketplace (incl. neighbouring areas)
- Proprietary Wifi data network incl. control of info displays
- 98,5% reliability

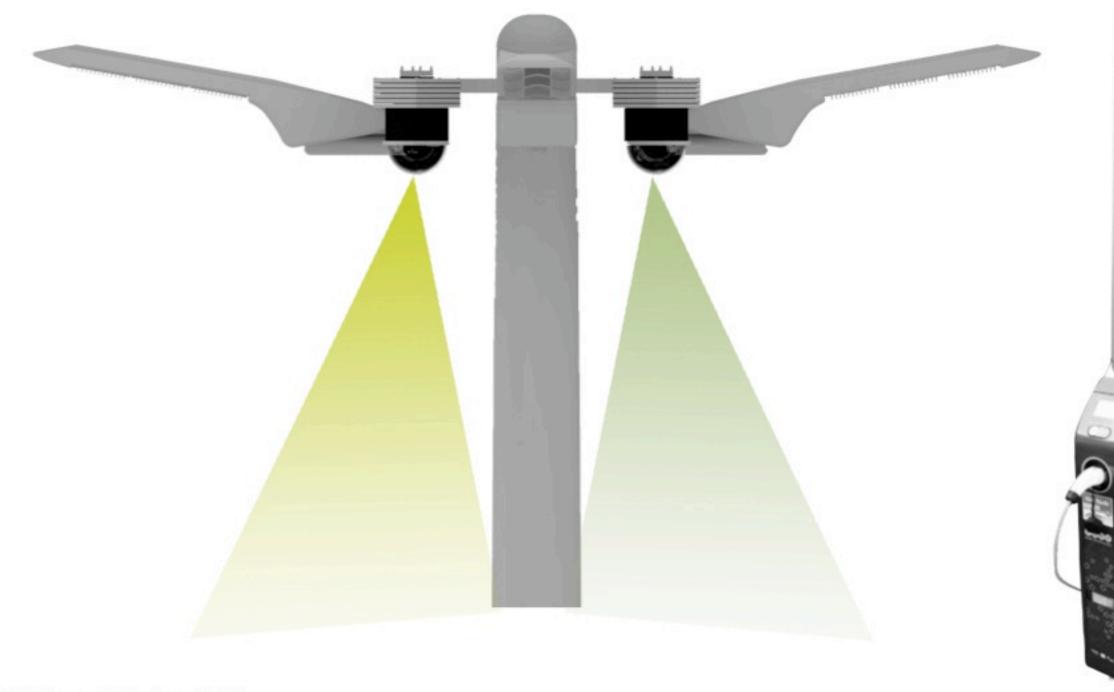




#### 1. Cleverciti Sensor LR7100 at Bad Hersfeld, Germany

Combination: smart parking and smart lighting

Cleverciti Sensors + LED Lighting + e-Tankstelle = Smart Lamppost

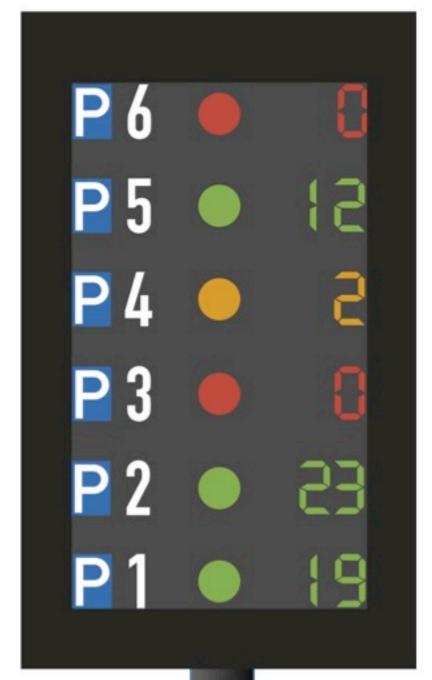






#### 1. Cleverciti Sensor LR7100 at Bad Hersfeld, Germany – LCD Car Park Routing





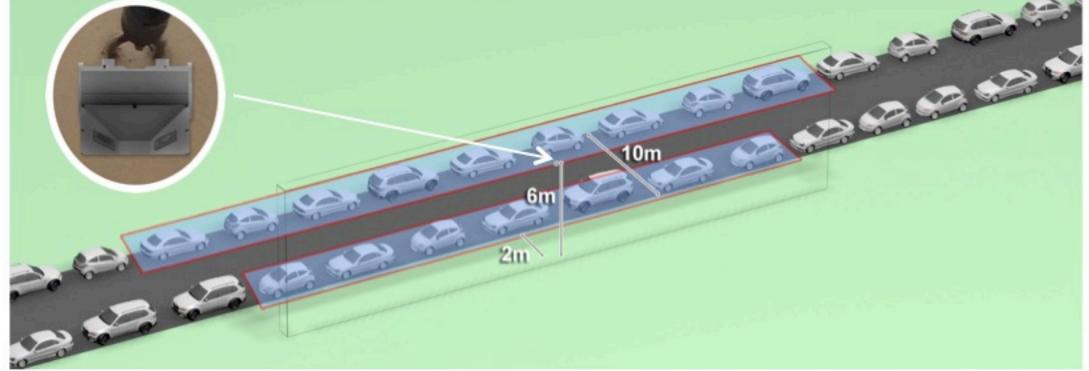




#### 1. Cleverciti Sensor NF 5640-120 Sensor at Vienna, Austria – mounting

- Wall mounting at cable attachements/rigging for street light or tramways
- Example: mounting height 6 meter
- Reach: 16+ parking spaces









#### 1. Cleverciti Sensor NF 5640-120 Sensor at Vienna, Austria – installation grid

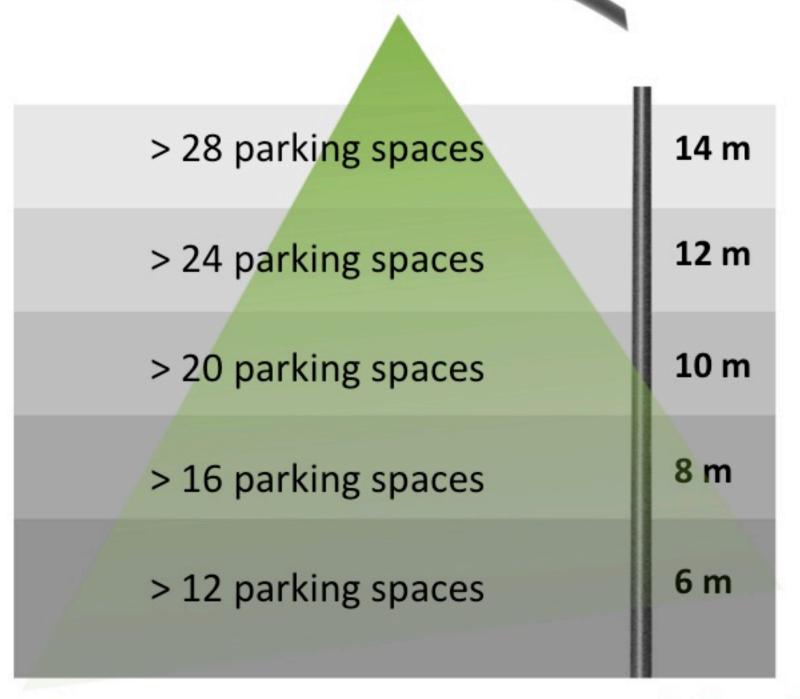




#### 1. Cleverciti Sensor NF 5640-120 Sensor – reach/installation heights

#### Parking spaces / installation heights

Plus 2 meters = plus 4 parking spaces\*





<sup>\*</sup>number of parking spaces increases with diagonal parking

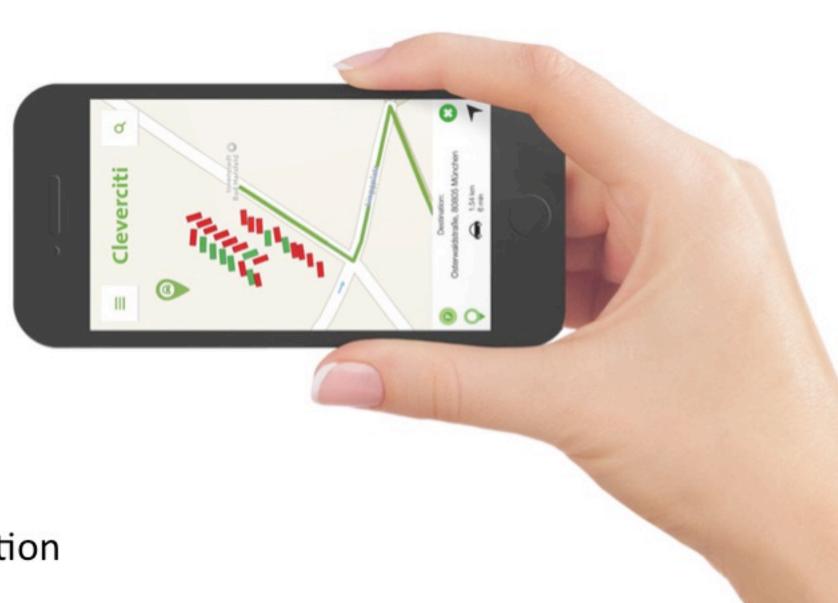


## 2. Cleverciti – the App



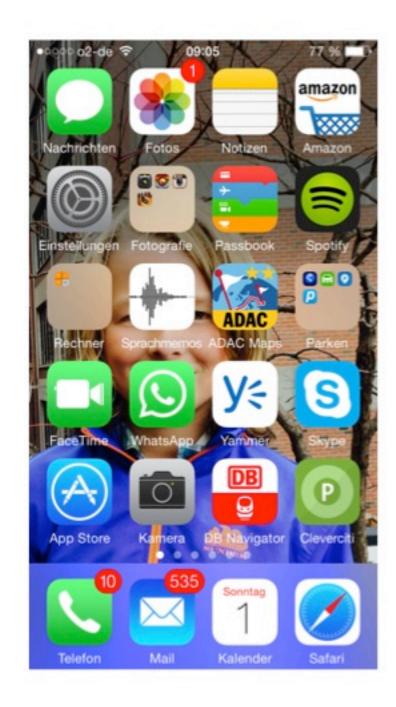


- Download App
- Enter destination
- Select car model
- Find closest available/free parking space
- Check costs
- Automatic navigation function
- Pay mobile





Download Cleverciti App

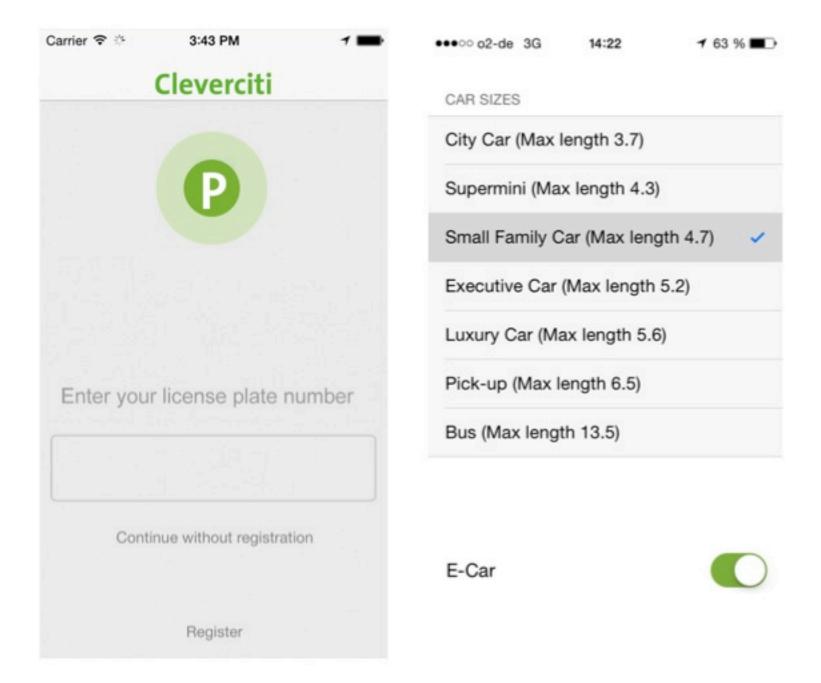








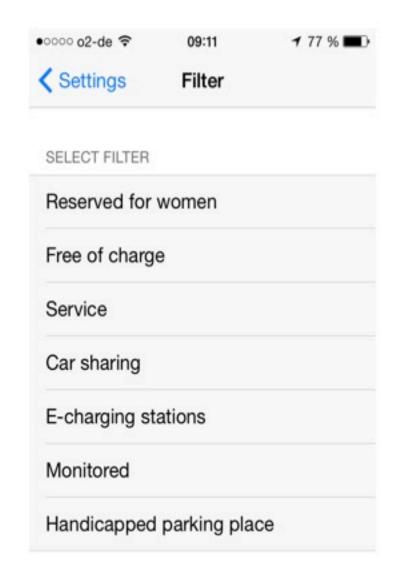
- Select car model
- Enter license plate number and payment method

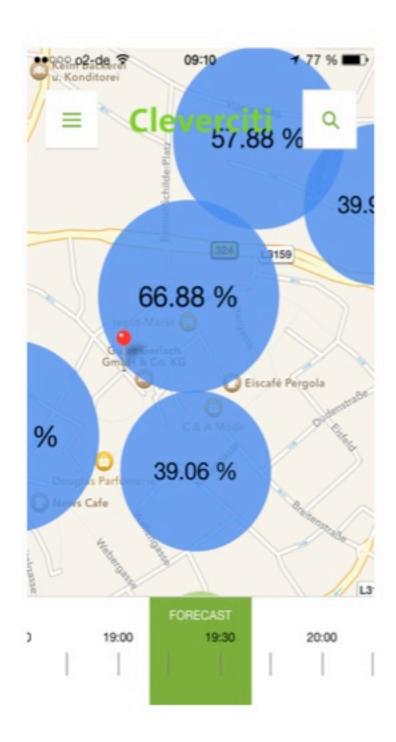






- Select individual filters
- Check forecast
- Check costs

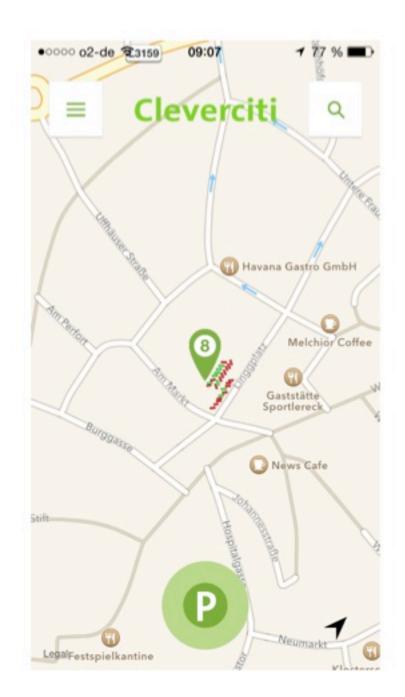


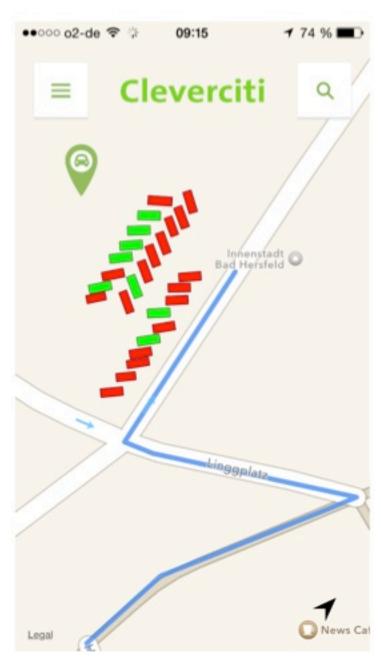






- Select Parking area or enter any destination
- Automatic navigation function
- Live parking status indicator during journey
- Automatic guidance to nearest available parking space
- See exact position of free parking spaces
- Avoid time for searching









- One Click Parking payment (optional with individual code)
- Remember parking position
- Find way back to car
- SMS reminder to stop payment after departure or maximum time of stay
- Pay for e-charging (optional)
- Optional integration of MPPs



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#### 3. Cleverciti Data Protection





#### 3. Cleverciti – Data Protection Q & A

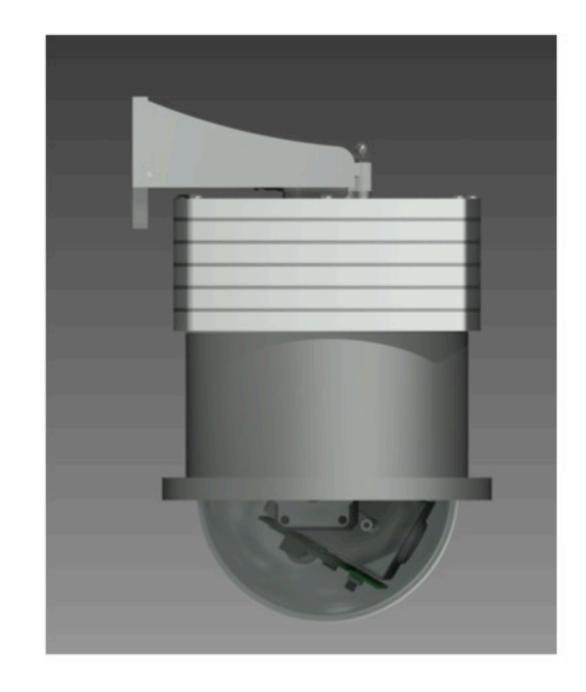
#### How does the Cleverciti Sensor work?

It contains a high precision pan/tilt engine with an accuracy of 0,0005 degrees. This allow extremely precise scans and analytics of each parking position. A fast processing unit calculates the exact position, including shape and size of each vehicle or free space.

#### Which object can the sensor recognize?

Parking shapes, structures, sizes and general type of car (for example SUV, Golf, Smart etc.) in predefined parking areas.

Exact GPS position - 50cm resolution







#### 3. Cleverciti – Data Protection Q & A

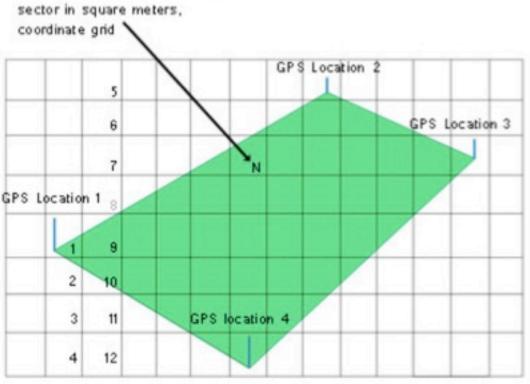
#### Which raw data does the sensor deliver?

The data transmission from each sensor to a central sever goes via Wifi or m2m

Only encoded GPS coordinates with the status of each GPS position (free, occupied, occupoed since) are transmitted.

The transmitted dataset of the Cleverciti Sensors does not contain any images or other data, that could be in conflict with any privacy issues or other issues with respect to personality rights in the private or pubic areas.









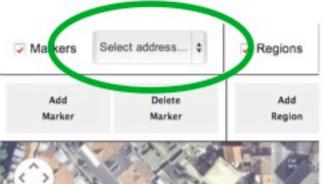
### 4. Cleverciti System Implementation





#### 4. Cleverciti Systems – Implementation – Part 1

Selection of parking area



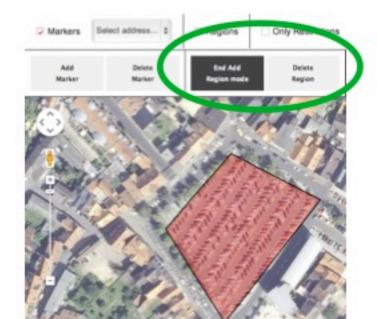


Definition of sensor installation (mast, wall etc.)





Data input relative to parking zones



- √ define parking areas
- ✓ define special parking conditions
- √ set restrictions
- √ input pricing

Installation (only electricty needed and WiFi or M2m)







#### 4. Cleverciti Systems – Implementation – Part 2

#### Communication of real time information to the driver



Via app

- ✓ Safe & easy mobile payment
- ✓ Possibility of white label solutions



Via local parking guidance



Via Web, Maps, Google earth



Via navigation devices







- ✓ Live control
- ✓ Occupancy data
- ✓ Daily/monthly statistics
- ✓ Possibility of dynamic tarification
- Prioritization of areas to be monitored
- ✓ Optimising the control procedure





#### Cleverciti – Contact



