LEADER PARK®

DYNAMIC PARKING GUIDANCE & COUNTING SYSTEM

PRESENTATION

LEADER PARK® is a latest generation system and **provides in real time all useful information about the parking occupation:**

- **To visitors: reliable,** clear and intuitive real-time guidance to the available car spaces which interest them,

- **To operators:** real time vision, frequentation, presence time, rotation, zones occupation, users types, "pasted" vehicles, spaces reservation, etc...

LEADER PARK® **reduces the traffic flows** in car parks, and **increases the rotation of occupied spaces**: as soon as a space is vacant, it is shown vacant in the whole car park. **The use of all the spaces is optimized.**

The LEADER PARK® **sensors with integrated signal** for underground parkings offer an **innovating attractive design**.

Placed in the alleys along the parking spaces, they are **highly visible 360° wide from more than 100m!**

The system manages the different types of car spaces: *Generic, Handicapped, Family, Electric,...*

The **LEDs dynamic graphic displays counters** indicate - all over the car park and at the entries - **the vacant spaces of each type** with their pictogram!

LEADER PARK® **guides the users to the most appreciated vacant spaces**, whatever is the rate of occupancy, and allows to take the best **benefit of each parking area** (creation of additional parking spaces).

A single LEADER PARK® **central controller can manage standalone directly up to 1000 spaces and their displays**, without any slave or secondary cabinets spread in the parking, and without a PC.

ALL equipments are centralized in one electric cabinet in a technical room: only sensors with signals and displays are visible by the users. Esthetics is perfect, and maintenance is simple & economic!

A thorough design of the equipments & mounting accessories allows not only **esthetic & robust mounting**, but mostly **extremely simple, fast, and economic installations in all parking situations**.

SYSTEM ARCHITECTURE
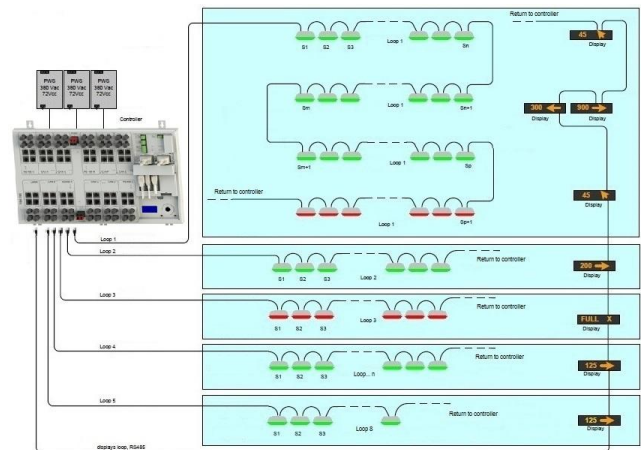
THE SENSOR WITH INTEGRATED SIGNAL

The LEADER PARK® **sensor with integrated signal light** is **placed in height on the "head" of the car spaces along the alley.**

It detects the vehicles from the alley and i**ndicates the vacant & occupied spaces** with the latest **ultra-high luminosity LEDs, visible 360° wide.**

- **Innovating & attractive design.**

- **Ultra-light signal light visible 360° wide.**

- **Double detection** for a **perfect reliability**.

- **Wide detection range**: 0,80 up to 4,00 meters.

- **Ultra simple, fast, et economic installation.**

- **Assorted mounting accessories for fixing in** all parking structures: under ceilings, on beams, under metallic rails, with hanger lengthens...

- **Unique cable (UTP) and standard RJ45 connector** for power & communication.

- **Voltage regulator on each device**.

- **Low consumption** < 2w + "eco-sleep" mode.

- **Ultra fast BUS CAN communication** (or RS-485).

- **Robustness** & **perfect sealing**.

COUNTING & GUIDANCE GRAPHIC DISPLAYS

The **displays are wisely placed in the car park** at each "point", where users must choose the best way to find easy a parking space.

- **High-luminosity LEDs 768 pixels graphic matrix**.

- Displays the **number of vacant spaces** and a **scrolling arrow** - programmable to 8 directions.

- Display with **intuitive pictograms and centred numbers without "front zeroes"**.

- Indicates **alternately the vacant different types of parking spaces**. Ex: Generic, disabled, Family, Electric, …. (Reduces the number of displays)

- **Multilingual texts and/or pictograms** (for tourist & international sites, airports, train stations, …)

- DC power through the same cable for power & communication (rapid standard RJ45 connectors).

1 space "disabled"

 6 spaces "Family"

THE "CENTRAL" CONTROLLER

- **"Heart" of the system, the LEADER PARK® controller centralizes in real-time the information of all sensors, and transmits the occupancy status to the counter displays and to the supervision PC**.

- It also **sends to the equipments in the parking the commands sent from the Supervision PC.**

- **Each central controller can manage standalone directly up to 1000 spaces and their displays**.

- **Multiple controllers can be linked in a network**.

INSTALLATIONS AND WIRING

- **Each BUS of sensors can link up to 125 sensors in a "loop", directly connected to the controller in the central electric cabinet** (without need of slave boxes in the parking)

- **The displays are linked in one or various specific BUS(ES)** connected directly to the central controller, without need of other power supply.

- Thus, **installations are extremely simple, fast, and economic to achieve in any parking situation.**

- **No need of any other AC power supply wirings out of our central electric cabinet.**

THE SUPERVISION

The supervision LEADER PARK® application offers the following main functions:

- **Centralized multi-parkings control, local** and/or **remote,** in **"Web Service"**.

- **Real-time vision of the whole parking status**, with all car spaces and displays, and a **dashboard with occupation rates by zones & alerts**.

- **Spotting** of **spaces occupation exceeding the maximum time** (predefined), with display of exceeded occupation time and color change.

- **Alert** when a defined area (or level) is **full**.

- **Spaces reservation** in the car park by type, by floor, by area or by alley.

- **Car park occupation statistics** by period, by zone, or level, by type of car space, and total, presented in comparison with the previous period

- **Sequential filling of the car park** by zones or levels allowing optimizing **lighting and ventilation management** according to the occupation and activity in each zone or level

- **Eco-sleep mode extinguishing the lights & displays** by a programmable schedule calendar according to the **opening hours & days.**

- **Continuous record of events & alarms**.

- **Messages of system alarms** and "defaults" real-time monitoring on the "Supervision PC".

- **Open software** allowing export of statistic records to a worksheet or database.

- Possible **interface with a System of Building Technical Central Management** (Security alarms, lighting and fans control, energy savings, …).

View of the "Web Service" Supervision Application