New "Mini" Parking Guidance System from Setrix

Environmental-friendly parking space management for public and private parking facilities

The new Setrix mini-PGS offers owners or operators of parking lots and parking garages a simple and affordable entry-level parking guidance system (PGS).
Parking guidance systems provide motorists with information on parking space availability well in advance, which helps to reduce parking search traffic and contribute to environment protection. The scalable system employs modern network technology with open interfaces to ensure a future-proof investment.

The System

The PGS is based on a counting system in which the processed totals are sent to interlinked information display panels. The data on parking space availability can be presented in various ways from a straightforward "Occupied/Vacancies" message through to an LCD display showing the number of parking spaces available. Alternatively, the parking information can also be transmitted to mobile navigation systems.

Sensors

The easy-to-install PGS is based on tried-and-tested counting sensors with induction loops together with the latest analysis logic. As a rule, loop detectors are used for the Parking function. These detectors enable multiplex channels with synchronization whenever several detectors are used.

By employing dual loops, precise counting can also be ensured when vehicles are traveling close together, for stop+go traffic and when vehicles are maneuvering. Incorrectly counting of supermarket trolleys and bicycles can thus also be avoided.
The sensors are connected to the basic central control station through an RS-484 standard interface via a two-wire cable.

If induction loops cannot be used, alternative sensors can be integrated into the system.

Dynamic information displays

There is a free choice of information displays for presenting the counting results. You can choose to display a simple message such as "Vacancies/Full" or the actual number of spaces available. The displays support LCD as well as LED technology.

The displays can be selected for inside or outside areas; they are connected to the central control station via a two-wire cable using an RS-484 standard interface.

For longer distances from the central control station, we offer connection via GPRS (mobile radio) as a cost-effective alternative. One advantage here is that no data cable is required.

Central control station

The basic central control station consists of an embedded computer system and the requisite interfaces. The basic version includes a screen and corresponding keys for data entry. This makes it possible to adjust the parameters and change the capacities. The basic version of the PGS used in this way includes all the essential functions.

Eight RS-485/RS-232 interfaces are available for connecting the detectors and information displays. Several displays or detectors can be controlled from a single interface via a bus.

The basic central control station also has two LAN interfaces. In addition, the system can be connected to the Internet via a LAN and a DSL modem/router.

A laptop can be directly connected via ethernet cable for maintenance purposes. A compact flash adapter is provided for data storage.

System benefits

The system offers an outstanding price/performance ratio. The simple system architecture permits fast and straightforward system installation. A twin-wire cable connects detectors and information displays. The RS-485 bus does not require any additional devices like modems; it is suitable for high transmission rates and can communicate over long distances. The system has a sufficient number of interfaces available and can be extended in the future. The use of standard network technology means that the PGS can be easily connected to other superordinate parking guidance systems or information systems.

Mini-PGS software

A software option can be used to upgrade from the basic central control station to a comprehensive PGS. The database-based system will then have functions like history, alarms and supervision functions for the parking area and message displays.

The PGS software is browser-compatible. This means that the system can be operated from any computer without the need to install software. All that is required is a browser, a local LAN connection, and a valid user name.

A DSL connection can be used to easily connect the system to the Internet and for operating or monitoring the system from any chosen location.

The system offers great flexibility and can be optimally integrated into your operating procedures.

Benefits of the Setrix solution

The basic version together with the mini-PGS software enables a system upgrade to a complete PGS system. The staged concept simplifies the installation and reduces the time needed for installation.
The network concept enables optimum integration into the customer's organization.
By using standard components and the existing network infrastructure, both acquisition costs as well as operating costs can be minimized.

The use of a Setrix mini-PGS system offers benefits for all:

- Customer: Innovative, ecological solution, more utility, and optimized operating costs
- Operator: Network structure optimized for each organization
- Supplier: Easy installation and new maintenance options

System overview

The following diagram illustrates the system architecture and network options