Sitraffic Guide

The parking guidance system for small towns, big cities and entire agglomerations
Contents

What is Sitraffic Guide and how does it contribute to making city centers more attractive? 
Read more on pages 2 and 3.

How does the system provide the municipal administration, the road users and its own components with the required information? 
Go to pages 4 and 5.

How can Sitraffic Guide be so favorably priced, making its operation cost-effective even for small towns? 
This puzzle is solved on pages 6 and 7.

Which cities are already using Sitraffic Guide? 
On pages 8 and 9 you’ll find a number of examples and our condensed reference list.

What else does Siemens offer in terms of parking systems? 
Pages 10 and 11 present our comprehensive portfolio.

Sitraffic Guide product brief

Sitraffic Guide is one of the software applications of the Sitraffic platform, the world’s most comprehensive road traffic management platform. Sitraffic Guide monitors the occupancy of parking lots and multi-story car parks and passes the information on on-street guidance panels and other information platforms such as the city’s Internet portal.

Open interfaces for connection to third-party systems allow the use of Sitraffic Guide as part of traffic infrastructure landscapes of any make and composition. It can be smoothly integrated in traffic management systems – for an effective link-up of urban and inter-urban traffic systems. But Sitraffic Guide is also an excellent choice as the first element of a future traffic management system to be expanded one function at a time.

The system requires neither a traffic computer nor other complex IT hardware. The basic version runs on an ordinary PC. Easy and intuitive operation guaranteed.
Makes city centers more attractive. Minimizes parking-related traffic.

To be attractive, a city center needs more than a varied retail landscape and nice restaurants. For people to use all these services, it must also offer convenient parking. Sitraffic Guide provides municipalities with an efficient and affordable solution that is highly appreciated by citizens and visitors alike.

Even on ordinary days, up to 40 percent of inner city traffic is parking-related. On Saturdays, especially before Christmas, this proportion may reach 90 (!) percent. Congestion generates pollution and makes people nervous or even aggressive – not really a pleasant atmosphere for citizens and visitors. Who does not need to go to the city, stays away.

Sitraffic® Guide helps minimize parking-related traffic by guiding road users intelligently via efficient routes to available parking spaces. Depending on system architecture, drivers can be provided with parking information before they even reach the city boundaries and then take the shortest route to the most conveniently located parking facility.

If Park & Ride lots are available in the periphery, a link-up of the system with public transport schedules further optimizes traffic management. As departure times and remaining waiting times are indicated on the information panels, the drivers feel well informed and are much more disposed to switch to busses, tram or underground.

For towns and cities of any size, Sitraffic Guide is an ideal tool for traffic guidance, helping optimize the occupancy of parking lots and multi-story car parks. It has already stood the test in towns of 16,000 inhabitants as well as in million-resident agglomerations. And especially in times when city coffers are anything but overflowing, Sitraffic Guide is an excellent choice because it can be operated autonomously without a traffic computer and expanded step by step with additional functions.
Information is everything. On the street, for the administration, within the system.

Sitraffic Guide is a true all-rounder in terms of information distribution. The system informs the road users about available parking spaces, provides the operator in the traffic control or municipal administration center with comprehensive analyses, and communicates on the technical level with other traffic applications.

Street-side information: Always in the best light.
The Siemens parking guidance portfolio includes a large choice of technologies for the street-side display of information, for example alphanumerical or fully graphic panels, with several lines of user-definable text. Among the most advantageous options are so-called transflective liquid crystal displays because their special backlighting ensures optimum readability in any light conditions. And with a service life of 200,000 hours and an MTBF of 2,000,000 hours, these displays are also extremely maintenance-friendly.

Information per Internet & Co: Parking made easy.
Sitraffic Guide can transmit parking space data to a whole range of information services, making the search for a free parking spot even more convenient for locals and visitors alike. Users can access the current parking situation data either via the municipal web portal or a modern navigation system and choose the optimum route for their purposes. Some parking facility systems even offer an option for reserving a parking bay. And as these systems are linked up with Sitraffic Guide, the reserved parking bays are deducted from the number of available parking spaces.
Information display at the center: Clear and precise.
No matter if Sitraffic Guide is installed as a small stand-alone solution running on an ordinary PC or as an extension package for a traffic computer, it enables the authorities to monitor and control all parking facilities in a city from a single location. After a very short training period, the operators will be able to handle the system since the graphical user interface based on Microsoft Windows and the integrated GIS (geographical information system) make for a familiar “look & feel.” Clearly structured alert management functions and numerous statistical analysis options provide the municipal decision-makers with a valuable data basis for future planning.

Information exchange between components: Wire-based or wireless.
For the data transfer between the Sitraffic Guide center and the distributed components (sensors and panels), users have the choice between several technologies: either via cable or via a wireless connection such as GPRS or using a time slot method.
Unlimited extensibility.
In any direction.

Sitraffic Guide is an integral part of the Sitraffic traffic center platform from Siemens. With this platform, fixed system structures are a thing of the past. Instead, the customer can choose from a wide range of functions to be added to the basic components. The advantages for cities and other municipal administration units are obvious: easier and more flexible setup, lower costs – and the freedom to expand the system at any time exactly as needed. In any direction.

The first step towards traffic management.
Sitraffic Guide can be implemented as the nucleus application of a future traffic management system. Or as an addition to an existing traffic management system. Or as an extension function of a traffic computer. Or ...

With Sitraffic, everything is possible because the traffic platform has an entirely modular structure. And, in contrast to conventional designs, these modules are not distinct systems of various sizes, but individual functions. Accordingly, the "parking guidance" function can be added to any basis. Or used as starting point. For cities of any size.

Substantial reduction of long-term overall costs.
Instead of buying a separate system for each desired application (and then investing a lot of time and money in system integration), city authorities relying on Sitraffic need only purchase additional function modules for implementation in the existing system. This means that general functions such as archiving, GIS map, operating alerts and so on need only be purchased once – for use with all system components. In many cases, this also reduces hardware requirements (server size) in the traffic center, adding further financial and administrative benefits.

Sitraffic platform: Complete range of functions without the need to integrate different systems
One user interface for all applications.
Integration in the Sitraffic center platform makes things a lot easier for the user. All traffic applications use a uniform user interface and offer the same alerting and archiving functions as well as identical display options. The direct meaningful exchange of data between different function modules creates added benefits, for instance the display of all traffic engineering equipment on the GIS map, providing the often decisive advantage of a complete system overview.

Customized scope of performance – extensible as needed.
What makes Sitraffic Guide especially cost-effective is the possibility to tailor each solution precisely to the changing requirements of the municipality. No need for oversizing the system just to be “on the safe side” in three or five years’ time. The customer can order exactly what is needed – when it’s needed. And if at a later point of time the city’s authorities wish to add a traffic computer center or an automated incident detection function or any other application from the comprehensive Sitraffic range, the system can be seamlessly expanded.

Interfaces for complete openness.
Many cities have already equipped their parking facilities with central or local car park management systems. Siemens protects this investment through the provision of open interfaces that enable the integration of the occupancy data from these systems into Sitraffic Guide.

Sitraffic Guide: Parking guidance systems beyond island solutions!
Until recently, parking guidance systems were usually operated as separate installations. Integrating them on the data processing level with the city’s other traffic control systems was often too complicated and rather costly.

With the Sitraffic platform, such island solutions are a thing of the past! Our Sitraffic Guide parking guidance system is fully integrated in such higher-level traffic control systems and can be simply run as sub-system. No matter which function module is the first to be installed, the system is open to expansion in any direction – one function at a time.

Application in Mülheim a.d. Ruhr: This secondary town near Düsseldorf, the capital of the German state of North-Rhine-Westphalia, is a busy industrial location and an attractive place to live. With the installation of 41 LCD panels for parking guidance, also indicating current occupancy levels for three of the seven public car parks, parking-related traffic has dropped sharply.
What do Nuremberg in Bavaria and a small town in Luxemburg have in common? The parking guidance system!
Esch sur Alzette in the southern part of Luxemburg is home to 28,000 people while Nuremberg is the 503,000-resident center of a large metropolitan region. But both use the same parking guidance system – Sitraffic Guide from Siemens. No matter if two car parks and a single display panel need to be controlled, or twenty parking facilities and several hundreds of panels – the highly flexible and finely modular structure of Sitraffic Guide can be easily tailored to any task.

Perfect migration in Erfurt, Offenbach and anywhere else.
Over time, a city’s traffic management systems tend to grow into a cluster of different technological “worlds” from various eras of realization that somehow need to work not only side-by-side but together. Siemens makes sure that every new system can be seamlessly integrated into such established structures and that the migration to new technical levels can be carried out smoothly. The German towns and cities of Erfurt, Gummersbach, Leverkusen, Nuremberg and Offenbach have already completed such upgrading projects, with excellent results.

Applications all over Europe. From the smallest to the most comprehensive solution.

Siemens can look back on more than a quarter of a century of experience in planning, delivering and installing parking guidance systems. Since its market introduction in 2008, Sitraffic Guide, the successor of our PLC2000 system, is working successfully in many cities. In some cases as stand-alone solution, in other places as part of a traffic management system, but always with exactly the right size for the task at hand.
A wide range of applications under one (system) roof!

As shown on pages 6 and 7, the Sitraffic center platform offers many advantages, including the possibility to expand the system one function at a time. Accordingly, our Sitraffic Guide parking guidance system can be operated in combination with a wide range of other traffic management applications on a shared platform – or as a stand-alone system. In many projects, for example in Nuremberg and Eindhoven, the parking guidance function has been implemented as an autonomous system independent of the traffic control computer or the traffic management system. Other cities such as Offenbach and Gummersbach don't have a traffic control computer to start with, and operate the parking guidance system as stand-alone installation. Cities like Erfurt, in turn, are running Sitraffic Guide as an integral part of their traffic management system.

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Sitraffic Guide adapts to any size: Nine out of many examples

<table>
<thead>
<tr>
<th>City, country</th>
<th>Number of residents</th>
<th>Number of car parks</th>
<th>Number and type of displays</th>
<th>Communication system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bergen op Zoom, The Netherlands</td>
<td>65,000</td>
<td>7</td>
<td>57 LED + 5 Text</td>
<td>PartyLine</td>
</tr>
<tr>
<td>Eindhoven, The Netherlands</td>
<td>214,000</td>
<td>13</td>
<td>42 LED</td>
<td>GPRS</td>
</tr>
<tr>
<td>Erfurt, Germany</td>
<td>203,000</td>
<td>10</td>
<td>58 Dot matrix/LED, 9 Text</td>
<td>PartyLine/GSM</td>
</tr>
<tr>
<td>Esch sur Alzette, Luxemburg</td>
<td>28,000</td>
<td>5</td>
<td>18 LCD + 3 Text</td>
<td>WLAN</td>
</tr>
<tr>
<td>Gummersbach, Germany</td>
<td>51,000</td>
<td>6</td>
<td>14 LCD</td>
<td>PartyLine</td>
</tr>
<tr>
<td>Lugano, Switzerland</td>
<td>54,000</td>
<td>13</td>
<td>86 LCD</td>
<td>GPRS</td>
</tr>
<tr>
<td>Mülheim a.d.R., Germany</td>
<td>167,000</td>
<td>7</td>
<td>41 LCD</td>
<td>PartyLine</td>
</tr>
<tr>
<td>Nuremberg, Germany</td>
<td>503,000</td>
<td>16</td>
<td>41 Dot matrix</td>
<td>PartyLine</td>
</tr>
<tr>
<td>Offenburg, Germany</td>
<td>59,000</td>
<td>4</td>
<td>12 LCD</td>
<td>PartyLine</td>
</tr>
</tbody>
</table>

Application in Erfurt: In the 200,000-resident city, Sitraffic Guide has made the search for free parking space much easier. The display panels use PartyLine and GSM to communicate.
An added-value partner.  
With a comprehensive portfolio.

Customers having decided in favor of a parking guidance system from Siemens are “automatically” provided with a whole range of services far beyond what is usual in the market. What is more, Siemens is the only supplier to offer a complete solutions portfolio for all aspects of parking, adding value that always pays off for municipal operators.

Expert advice is not far.
Our sales engineers are experts in all areas of parking facility operation. That is to say, they are not only familiar with every detail of our Sitraffic technologies and products, but they also understand the requirements and problems of towns and cities in terms of parking and traffic management. All through the planning stage of a solution, our top-notch experts support the customer with sound advice.

Service and maintenance contracts made to order.
Customized service and maintenance contracts help ensure that each solution is serviced to exactly the extent desired by the customer.

Of course, it always makes sense to conclude a preventive maintenance contract, too, because then no necessary measures will be accidentally forgotten, and potential causes of malfunctions can be remedied before they present a risk. By the way, our service portfolio includes an attractive electronic components insurance, which we will arrange directly with the insurer if requested.

Support center manned around the clock.
As part of a service agreement, our “24/7” technical support center is available to our customers every day and around the clock. In conjunction with our worldwide spare parts logistics service, this support center guarantees immediate and efficient help in any emergency.
Overview of our parking portfolio

<table>
<thead>
<tr>
<th>Sitraffic Guide parking guidance system</th>
<th>Sipark PMA barrier-paystation system</th>
<th>Sipark SSD parking guidance system for multi-story car parks/single-space monitoring</th>
<th>Pay-and-display machine families</th>
<th>Electric charging system</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Parking data recording</td>
<td>• Detectors</td>
<td>• Infrared sensors</td>
<td>• Sitráfico Sicuro</td>
<td>• Sitráfico Epos</td>
</tr>
<tr>
<td>• Parking information panel control</td>
<td>• Barriers</td>
<td>• Dynamic direction signs</td>
<td>• Sitráfico Prisma</td>
<td></td>
</tr>
<tr>
<td>• Parking route management</td>
<td>• Entry and exit control units</td>
<td>• Dynamic remaining-space displays</td>
<td>• Sitráfico Sity</td>
<td></td>
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<tr>
<td>• Dynamic occupancy indication signs</td>
<td>• Payment systems</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Parking zone management</td>
<td>• Hard- and software for administration and management</td>
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</tbody>
</table>

From parking guidance, multilingual pay-and-display machines and barrier-paystation systems right up to electric charging facilities for recharging E-cars – Siemens is the one-stop-shop for all parking space management applications.
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The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.