

SIEMENS

Ingenuity for life



Sittraffic Wimag

Easy, reliable and cost-effective
traffic and parking space monitoring

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Compact dimensions of only 7.5 × 7.5 × 6.6 cm, wireless transmission to the base station, fast installation, typically 5 years of operation before the first maintenance work even with high traffic volumes: Sitraffic Wimag. The Sitraffic Wimag Access Point ensures secure data transmission from the detectors to the traffic controller.



Our Sitraffic Wimag family of detectors: state-of-the-art detection and wireless technology

Our Sitraffic® Wimag family of traffic detectors scores with a range of remarkable advantages. No need for expensive construction work to bury detector loops in the pavement or install power and data cables: The very compact detectors measure only 7.5 x 7.5 x 6.6 cm and can be installed in a matter of minutes – totally without cabling. And yet these powerful detectors collect highly precise information on current traffic volumes for transmission to the traffic controllers via their base stations.

The optimum detector for every application

Collecting reliable traffic data at intersections calls for different technologies than those monitoring the occupancy of HGV parking spaces. The Sitraffic Wimag family offers a choice of detectors specifically designed for each of these uses. Sitraffic Wimag VD, for instance, is a traffic detector that provides accurate data on moving traffic as input for optimum green-phase switching.

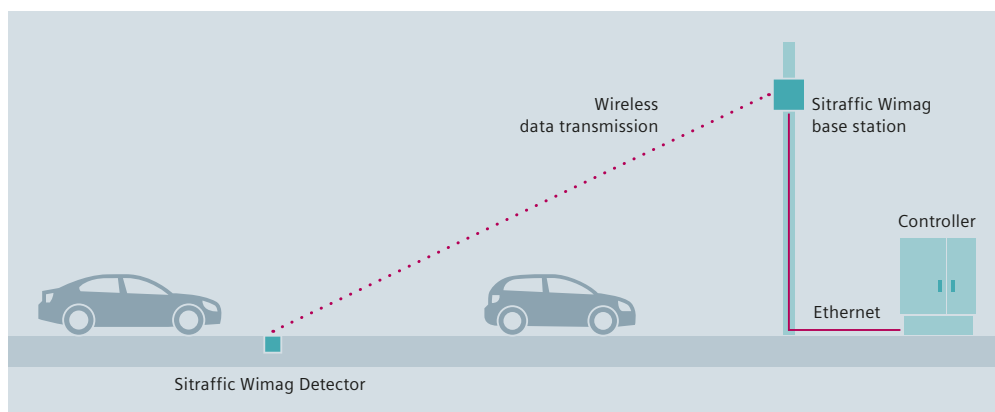
The Sitraffic Wimag PD parking detector uses two different technologies for the reliable detection of cars and HGVs parked

in spaces equipped with the system. And Sitraffic Wimag MR is a special 'MicroRadar' version which is also able to detect other vehicle types such as trams with high precision. All three detector versions can be integrated into a single system since they share the same transmission technology, including repeaters, base station and dedicated software.

Easy, cost-efficient installation – wherever needed

Components that are not needed will entail neither installation costs nor maintenance work. With Sitraffic Wimag, no cabling is required because the detector's operation is entirely wireless. This and the device's unusually compact dimensions allow for very fast installation. Another advantage is the complete freedom in the choice of the sensor's position: It can be installed at any distance from the intersection controller in any type of pavement. The choice of the installation site can thus be based purely on traffic-engineering criteria, without being restricted by cost considerations.

The new Traffic Dot configuration software is the perfect tool for the even faster and easier commissioning of all detector versions.



Via radio link, Sitraffic Wimag detectors transmit the data to the base station, which forwards it per Ethernet to the traffic controller.

Three detectors, two detection technologies, numerous applications

Sitraffic Wimag VD: Magnetic-field detection ensures high detection rates in moving traffic

The use of magnetic-field technology makes the Sitraffic Wimag traffic detector (VD) superior to most other detector types for this kind of application. As Sitraffic Wimag VD is embedded in the tarmac right in the center of the lane, the vehicles pass directly over the sensor. Thus it is virtually impossible for the sensor to “miss” a vehicle or “detect” a non-existing one. The detector also performs substantially better than conventional overhead detectors when it comes to recording time gaps between individual vehicles, even when these occur at rather large distances from the stop line.

Sitraffic Wimag MR: MicroRadar technology enables the precise detection of cyclists and trams

The additional MicroRadar unit embedded in the Sitraffic Wimag MR provides this detector type with even higher flexibility. It is perfect for especially demanding detection tasks and ensures the reliable detection of all kinds of vehicles, including bicycles and trams – data that is needed, for instance, as the basis for green-phase request systems at stop lines. The detection zone is user-programmable between 1.2 m and 3 m.

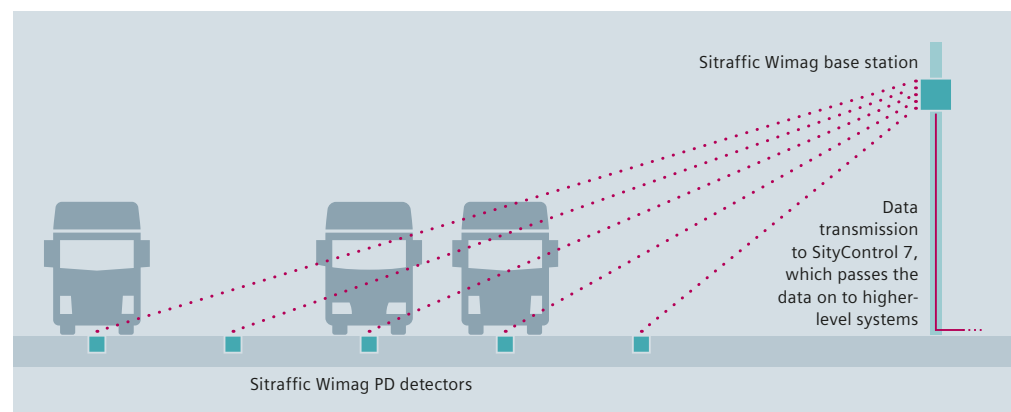
Sitraffic Wimag PD: Magnetic-field technology plus MicroRadar for the cost-effective detection of parked vehicles

A function that has long been used in parking garages is now also available for outdoor parking spaces: individual parking space monitoring. Sitraffic Wimag PD is the cost-effective and easy-to-install solution for the reliable detection of parked vehicles. Since it uses both magnetic-field technology and MicroRadar, it is able to reliably identify the current occupancy status in any weather and in all seasons. As for all Sitraffic Wimag detector types, installation requires no costly and time-consuming cabling work because the status messages are transmitted via mobile radio.

Sitraffic Wimag PD dependably detects cars and HGVs, enabling a number of very useful applications such as:

- Reporting vacant HGV parking spaces in motorway rest stations to traffic management and information systems
- Detecting the occupancy status of on- and off-street parking spaces
- Monitoring areas that must not be blocked by parked vehicles

Sitraffic Wimag PD allows the reliable detection of vehicles in outdoor parking spaces.





Sittraffic Wimag PD is the right tool for the precise detection of cars and HGV in outdoor parking spaces.

Technical data

Sitraffic Wimag VD, Sitraffic Wimag MR and Sitraffic Wimag PD detectors

Ambient temperature limits	−40 °C to +85 °C
Dimensions	75 × 75 × 66 mm (L × W × H)
Radio frequency	2.4 GHz (ISM band, no license required)
Rated life of battery	5 to 10 years

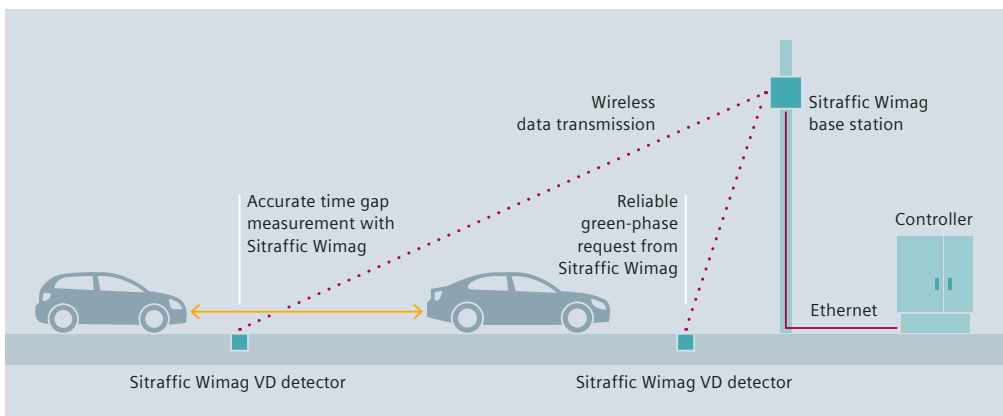
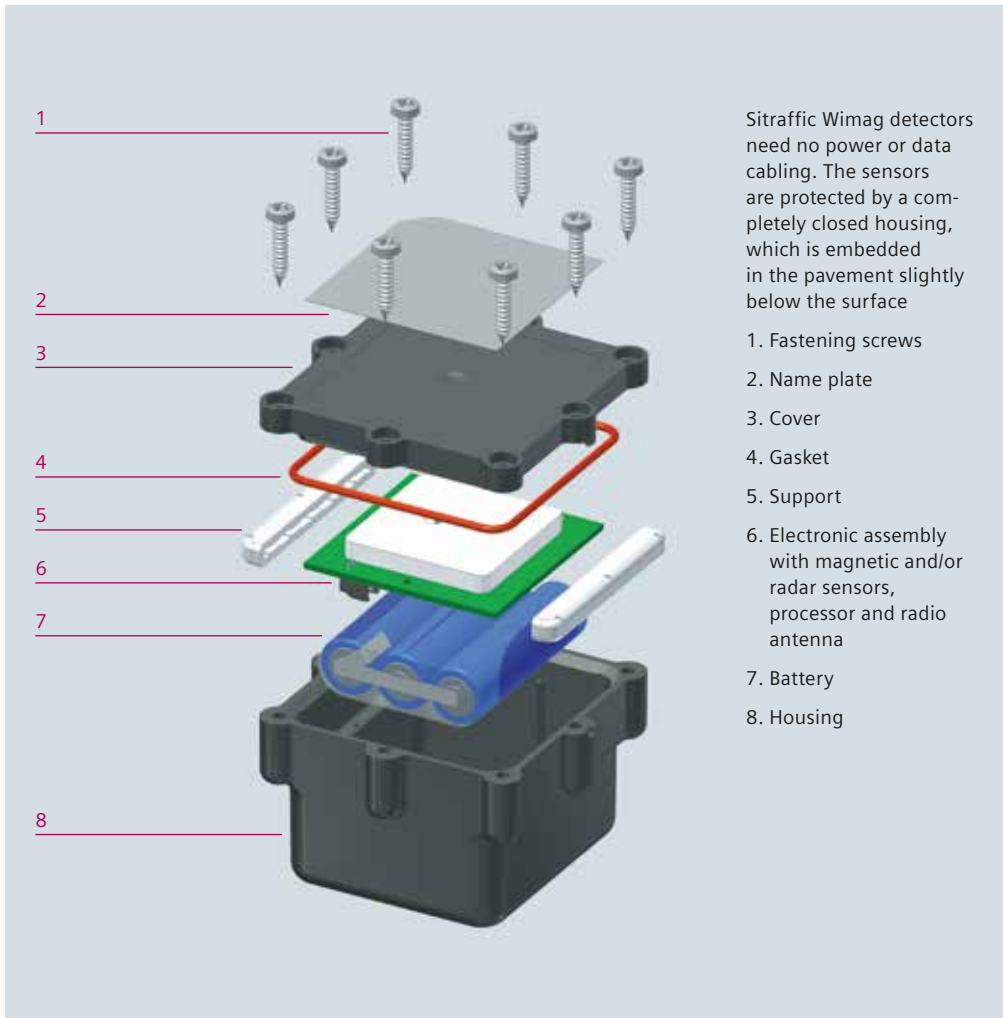
Sitraffic Wimag repeater

Ambient temperature limits	−40 °C to +80 °C
Dimensions	134 × 106 × 135 mm (L × W × H)
Weight	1.8 kg
Communications	<ul style="list-style-type: none">• Radio link up to 20 detectors (Sitraffic Wimag VD, MR)• Radio link up to 50 detectors (Sitraffic Wimag PD)
Radio frequency	2.4 GHz (ISM band, no license required)
Rated life of battery	approx. 5 years
Power supply (optional)	24 V power line

Sitraffic Wimag base station

Ambient temperature limits	−40 °C to +80 °C
Dimensions	228 × 121 × 96 mm (L × W × H)
Weight	1.2 kg
Power supply	48 V power over Ethernet acc. to IEEE 802.3af
Communications	<ul style="list-style-type: none">• Radio link up to 96 detectors (Sitraffic Wimag VD, MR)• Radio link up to 500 detectors (Sitraffic Wimag PD)
Radio frequency	2.4 GHz (ISM band, no license required)

The Sitraffic Wimag detectors at a glance



Sitraffic Wimag VD measures the time gaps between vehicles with such a high degree of accuracy that optimum green-phase switching becomes possible.

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