

SWARCO WAYCOM 3.1

BLUETOOTH® / WIFI SYSTEM

DETECTION AND TRAFFIC ANALYSIS VIA BLUETOOTH®

The WAYCOM 3.1 Bluetooth® / WIFI system is used to record and transmit Bluetooth® / WIFI / BLE identifiers of vehicles, hands-free kits and mobile devices and thus provides the basis for traffic analysis, travel time and routes.

WAYCOM 3.1 BLUETOOTH / WIFI

The system consists of the WAYCOM sensor, which scans the Bluetooth® and WIFI MAC addresses, and a communication router, which serves as an interface and manages the connected sensors. These are integrated in a lockable compact housing including all necessary components.

The system can be used for multiple lanes and higher speeds of up to 200 km/h. It achieves detection rates of more than 30 % and recognition rates of more than 25 %. The sensor scans the frequency field in the specified parameters and delivers long-term data to the integrated data logger of the modem, from where data and time stamps are forwarded to the server.



BENEFITS

- Proven technology with a monitoring and hacker-proof sensor (Key-Technology)
- The communication router enables the connection of several Bluetooth® / WIFI sensors
- Non-invasive and cost-effective system solution
- Vehicle speeds of up to 200 km/h possible
- Low power consumption
- Highly integrative and compact system
- Multi-level security and data protection concept (compliant to German GDPR)
- Easy integration with other systems without high development effort
- Integrated in SWARCO MYCITY

WAYCOM 3.1 BLUETOOTH / WIFI SYSTEM

FEATURES OF WAYCOM 3.1

- Modular system design
- Management of up to four Bluetooth®, WIFI or BLE sensors
- Coverage rates of 30 % and more (based on ADT)
- Detection rates of 25 % and more (for 4-lane highway)
- Encryption and immediate deletion of device addresses / MAC-IDs
- Communication via LTE, UMTS, GPRS, Ethernet
- GPS retrofittable

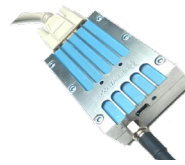
TRAFFIC ANALYSIS VIA BLUETOOTH® / WIFI / BLE

The WAYCOM sensor detects the unique and anonymous MAC address of active communication devices (Bluetooth® / WIFI / BLE), passing through the system in the defined area of the antenna. These can be cell phones, PDAs, navigation devices, hands-free kits, onboard devices, laptops and similar.

Via a mobile phone connection (LTE / UMTS / GPRS) or TCP/IP connection (Ethernet cable) the encrypted MAC IDs are transmitted by the WAYCOM communication router to the central server and database. The encrypted MAC IDs of further WAYCOM scanners are matched with it and thus travel times and routes are determined.

The carrier system enables the connection of several Bluetooth sensors to detect different zones or directions. Due to the low power consumption, it is particularly suitable for use with solar stations.

COMPONENTS OF THE BLUETOOTH SYSTEM



WAYCOM sensor
Bluetooth® / WIFI / BLE



Communication router:

Contains application software for managing the sensors, connection with the broker and the online connection



Rittal cabinet:

- IP66 protection class, pole mounting
- Cost-effective through the use of smaller solar panels
- Various interfaces

Accessories (if required)

- Socket
- Overvoltage / lightning protection
- UPS / battery buffering
- Solar unit with battery and panel
- Various antenna options according to the requirements