

GECKO TRAFFIC/CLASS

AUTONOMOUS TRAFFIC DATA ACQUISITION FOR VEHICLE COUNTING AND VEHICLE CLASSIFICATION

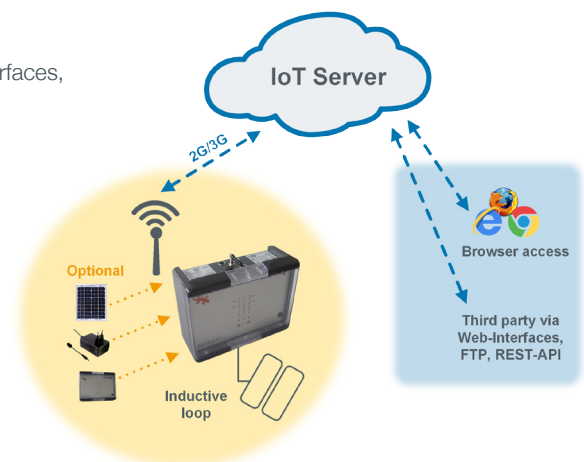
SWARCO TRAFFIC SYSTEMS GmbH is a member of the internationally active SWARCO group, the one-stop shop for road markings, signage, signalisation and traffic management – your reliable partner for traffic solutions.

Based on the proved and tested DIN-rail induction loop detectors, the Gecko system was designed for autonomous traffic data acquisition with battery supply and data transmission via mobile communication network. Nearly all fields of traffic data acquisition are covered, from basic vehicle counting with Gecko Traffic up to vehicle classification e.g. acc. to TLS¹ or ASTRA² with Gecko Class.

Supplemented by the cloud-based SWARCO-WEB-platform and WEB-interfaces, the Gecko system is already part of the IoT (Internet of Things). Share your counting data with the public and raise e.g. the awareness for traffic loads or document the progress by showing your road construction projects.

BENEFITS

- Simple, economic installation
- Low running costs for mobile communication network and provision of data
- Very low power consumption, self-sustaining for up to 6 months with battery operation
- Alternative: Operation with mains voltage or photovoltaic installation, autonomous operation for 2 weeks (integrated battery)
- Stable and reliable data acquisition, absolutely insensitive to weather and disturbances
- Vandalism-proof due to various installation options such as stand-alone, pole-mount or placed in the ground
- Verification of the data acquisition on location using vehicle readout at the service interface
- Web-based data provision: The data is available everywhere



ACCESSORIES



Power supply unit for 230 V mains supply



Solar panel Set for autonomous voltage supply



Accu Pack Lithium Ion with operating period of up to 6 months



¹ Technical terms of delivery for roadside stations
² Swiss federal roads office

GECKO - AUTONOMOUS TRAFFIC DATA ACQUISITION

FUNCTION

Gecko now provides the functions and excellent features of the SWARCO TRAFFIC SYSTEMS inductive loop detectors in an autonomous system for traffic data acquisition. The core are the DIN-rail mount detectors, which were extended to include data transmission via mobile communication network.

Due to the considerable reduction of power consumption it is now possible to implement an autonomous data acquisition for up to 6 months using an easy-to-install detection system. The alternative connection to mains voltage or the optionally available photovoltaic installation allows permanent operation with an autonomy of two weeks when power supply fails (integrated battery).

Traffic data are transmitted in aggregated form, the interval periods for data acquisition and transmission can be adjusted. Measurement and diagnosis data (e.g. ID of measurement location, state of battery, intensity of mobile communication network, loop failure, measurement frequency) can be accessed at any time via SWARCO-WEB-plattform.

COMMUNICATION AND EVALUATION

- Automatic wireless data transmission via GSM modem to the SWARCO-WEB-plattform (SWARCO cloud)
- WEB-based system for visualization, evaluation, documentation and export of counting values
- Data aggregation: Interval data separated by driving lane for counting values of all configured vehicle classes and average speed.

Gecko Traffic: Basic model for autonomous vehicle counting for traffic data acquisition on 2 or 4 lanes.

The software module **Gecko Class** offers the following classification options (Basic model Gecko Traffic obligatory):

2 classes acc. to TLS:	car-similar vehicles (other vehicles, motorbike, car, van) / HGV-similar vehicles (car with trailer, HGV, HGV with trailer, HGV articulated, bus)
(5+1) classes acc. to TLS:	other vehicles / car group (motorbike, car, van) / car with trailer / HGV / HGV combination / bus
(8+1) classes acc. to TLS:	other vehicles / motorbike / car / van / car with trailer / HGV / HGV with trailer / HGV articulated / bus
SWISS 10 classes acc. to ASTRA:	motorbike / car / car with trailer / van / van with trailer / van with semitrailer / bus, car / HGV / HGV with trailer / HGV articulated

Customer specific classification on demand.

TECHNICAL FEATURES

Power supply	Autonomous battery operation: autonomous time 6 / 3 months (Gecko2 / Gecko4) with mains or solar power supply auton. time 2 weeks
Interval periods	Data acquisition: 3 / 5 / 15 / 30 min, 1 h - 12 h Data transmission 1 h - 24 h
Interfaces	Service interface GSM modem for data transmission within mobile communication network
Operating temperature	-15°C to +65°C
Protection	IP67
Connections	Supply voltage (with external mains or solar supply) 4 (Gecko2) or 8 (Gecko4) inductive loops Service interface External GSM antenna

INSTALLATION



Standard installation
e.g. for existing cabinets



Pole installation
(typical installation for Gecko Class)



Ground installation



SWARCO TRAFFIC SYSTEMS GMBH

SWARCO TRAFFIC SYSTEMS GMBH is one of the leading suppliers of intelligent traffic systems in Germany. Building on many decades of experience, it offers a wide range of innovative solutions for urban and interurban traffic management, including parking and traffic detection. Its nationwide service and maintenance network guarantees highest possible system availability and improved road safety. With economical, sustainable, and environmentally friendly technologies we help ensure smooth and safe traffic flows.

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