



# FLEX Sensor

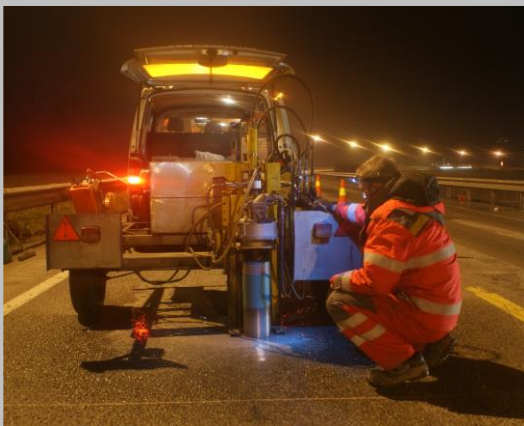
## Autonomous Classifier Detector *Flexible traffic data collection*

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### Traffic Data Collection

The FLEX Traffic Measurement System enables remote, accurate and cost-effective management of efficient traffic data collection.

Vehicle detectors, available in multiple configurations, installed on the road surface collect and send traffic data over the Internet.



### Highlighted Features

- Quick installation
- Autonomous operation
- Remote management
- High quality data per vehicle
- Long battery life: 10 years <sup>(1)</sup>
- Remote software update
- Extremely rugged design (IP68)
- Track temperature reports

(1) Sending data once a day.

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### FLEX Vehicle Detector

The STMS FLEX is a patented wireless detector powered by a long-lasting battery that uses magnetometric technology to detect, classify and measure the speed of passing vehicles. The detector is designed to operate completely autonomously, sending data via the mobile phone network, and thanks to its long battery life it is a very flexible device that can be configured for almost any scenario, both for continuous data collection and for scheduled periods.

Using the latest magnetometric technology, together with artificial intelligence (AI) algorithms, very high quality data is obtained.

### Easy installation, remote management

The FLEX is the ideal solution for IMD data collection, seasonal traffic variations, spot surveys and much more. The detector is designed for stand-alone operation and is installed in less than 15 minutes. Once installed, the detector is ready to detect and deliver high-quality vehicle data for up to 10 years, with daily data delivery. The combination of easy installation, high-quality data and the flexibility of remote management makes the FLEX detector a perfect replacement for other traditional solutions.

### Physical specifications

Dimensions 155 mm ø 115 mm height  
Protection type IP68

### Operating specifications

Battery life 10 years (Data sent once a day).  
Operating temperature: -35°C to 70°C

### Installation specifications

Drill diameter > 170 mm ø  
Depth 180 mm  
Average installation time: less than 15 minutes per lane

### Mobile network specifications

Bands: GSM:850,900,1800,1900 MHz  
UMTS:800,850,900,1700,2100,1800,1900,2100 MHz  
LTE:700,800,850,900,1700/2100,1800, 1900,2100,2600 MHz  
SIM: Mini-SIM (ISO/IEC 7810:2003, ID-000)

### Performance specifications

Count: 99% reliability.  
Length: 1% average error.  
Speed: -200 to +200 km/h (0.1 km/h resolution)  
Speed accuracy: +/- 1% average  
+/- 4% per vehicle (Percentile: 85%)  
Classification types: **95%** with Motorcycle, Light, Medium, Truck and Bus, Trailer . Other possible schemes, up to 13 classes.  
Track temperature: -40°C to +125°C (0.1°C resolution)

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Specifications subject to change without notice

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