SWISS**TRAFFIC**
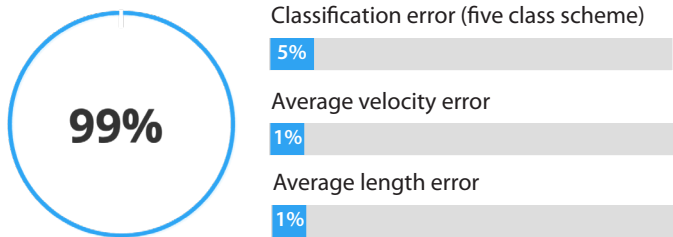*we innovate mobility*

SWIROO
PART OF SWISSTRAFFIC

AI | swissFLEX AI

A standalone wireless vehicle sensor for accurate continuous measurement. The SWISSFLEX AI provides accurate, independently verified data per vehicle. Get reliable counts, speeds and classifications.

WIRELESS WITHOUT DRAWBACKS

The SWISSFLEX AI sensor is a standalone vehicle sensor with integrated battery and modem that requires no roadside equipment. The sensor is installed in the center of the lane to be measured and connects directly to the cloud. The new version gives up to 10 years of continuous measurements and daily uploads on one battery pack. With quick installation, remote management and accurate data, the SWISSFLEX AI sensor is an ideal solution for urban streets, highways and even rural gravel roads.

99%
Completeness

Classification error (five class scheme)
5%

Average velocity error
1%

Average length error
1%

* Test by the Nordic traffic authorities research cooperation NordFOU.

ACCURACY

We continuously participate in third party tests organized by road administrations and research organization throughout the world to assert the performance of our vehicle sensors. All accuracy claims are based on independent and published reports.

What data do I get?
Vehicle-by-vehicle data that can be used for statistics, detailed studies or ITS applications.

Timestamp
Synchronized time with millisecond resolution. Each vehicle is individually time-stamped, with 99% accuracy.

Velocity
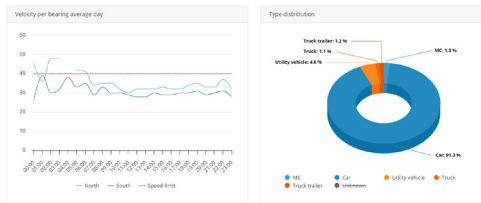-200 to 200km/h with 0.1km/h resolution.

Classification
Up to 5 classes, choose your scheme. The most powerful AI offers classification accuracy of over 95%.

Length
Bumper to bumper with 0.1m resolution.
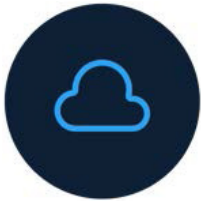

Dashboard

A PERMANENT SOLUTION

With up to 10 years of continuous measurements, the SWISSFLEX AI can replace both loops, radars and manual counts.

A FRACTION OF THE COST

Without the need for roadside equipment or power, the total cost of establishing a permanent measurement location with the SWISSFLEX AI is a fraction of that with loops or radars.

POWERED BY AI

This astonishing accuracy is made possible by the advanced deep learning architecture designed by leading academics and researchers.

SWIROO
PART OF SWISSTRAFFIC

Measure anywhere

Since no roadside equipment is needed, the SWISSFLEX AI can be installed basically anywhere in less than 15 minutes to collect traffic data.

Battery-life

With new cutting-edge energy management, the SWISSFLEX AI can handle up to 10 years of continuous measurements and uploads on one battery pack.

Robust

Built to handle Nordic winters and Australian summers and with no roadside installation, the SWISSFLEX AI requires no maintenance once installed.

Open

Built on open protocols, the SWISSFLEX AI can be used with most existing software, including full support in Traffic-web (dashboard) for a complete solution.

"The data is not ok, it's fantastic".

John Byrnes, PDG de Road Information Technologies

PHYSICAL SPECIFICATIONS

HEIGHT: 115 mm
DIAMETER: 155 mm
OPERATING TEMPERATURE: -35°C to 70°C
INGRESS PROTECTION: IP 68

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)

INSTALLATION SPECIFICATIONS

DRILL DIAMETERT: >170 mm
DRILL DEPTH: 180 mm
INSTALLATION TIME: ~15 min

SMART MOBILITY SOLUTIONS
PRODUCT CATALOGUE