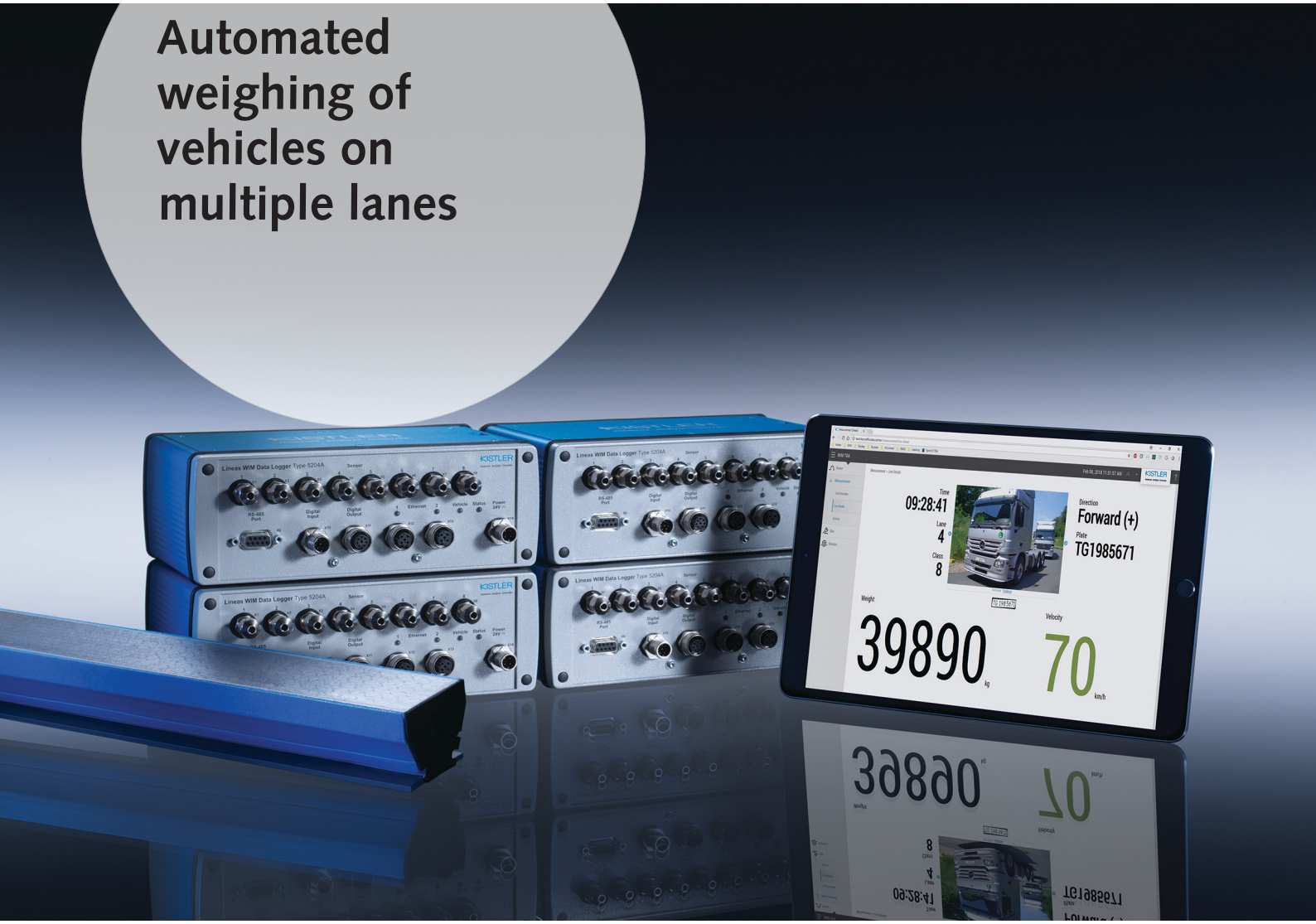
KISTLER

measure. analyze. innovate.

Automated weighing of vehicles on multiple lanes



KiTraffic Plus system for Weigh In Motion

The key to a sustainably managed & well protected road infrastructure.

Typical use: direct weight enforcement at all driving speeds.

KiTraffic Plus - the scalable WIM system

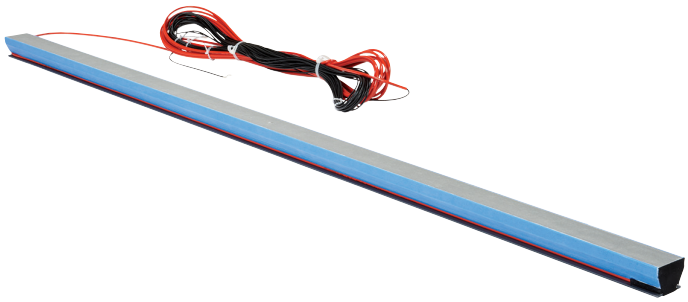
The architecture of this Weigh In Motion (WIM) system is flexible enough to cope with both diverse application requirements and the operational limitations of the installation site. The application sets specifications for what information should be recorded and defines the required measurement accuracy and reliability. The operational conditions are related to the characteristics of the passing vehicles, the traffic intensity, the road conditions, speed range, temperature range, etc.,

To be able to meet the range of different specific customer requirements Kistler offers a scalable solution that allows flexibility through a combination of different numbers of Lineas sensors in different layouts with a flexible number of Kistler WIM data loggers. The open architecture of KiTraffic Plus allows integration of further components like ANPR cameras for vehicle identification or temperature sensors. All information is combined into one dedicated system, accessible through either a uniform web based user interface or a machine readable interface.

By installing the sensors in a tilted orientation the accuracy can be improved. Tilting the sensors enables single or dual tire vehicles and lateral position to be detected thus improving accuracy, for a more detailed vehicle classification. Independent of the specific solution a Kistler WIM system will always weigh vehicles accurately and reliably at all speeds. The unique quartz technology makes sensors highly stable and durable and they are quickly installed in any kind of road pavement.

Main components of KiTraffic Plus system

WIM data logger



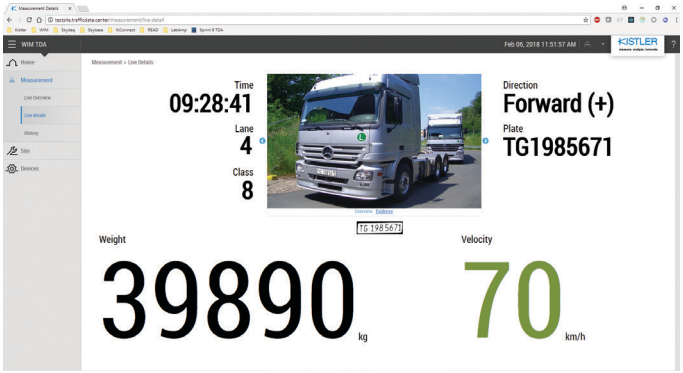
The maintenance-free Lineas WIM sensor: based on unique quartz crystal technology.

Reliable weight data with Kistler's WIM data logger

The Kistler WIM data logger is specifically designed to process signals from Lineas WIM sensors. It is easily integrated into existing solutions to deliver highly accurate measuring data.

Maximum accuracy, long lifetime

Kistler's high-precision quartz crystal Lineas WIM sensors can be installed in any kind of pavement. The strip sensors are easily grouted into a slot in the pavement, and they are maintenance free. Kistler's Lineas WIM sensors feature a very wide measuring range, so they can measure accurately both light and heavy vehicles.



User friendly interface

Kistler's WIM systems come with a state of the art, web based user interface. No additional software needs to be installed to set-up the whole system, read-out measurement data or change settings. Furthermore, all relevant information is available for other systems via the machine readable REST API interface.

Key Features of KiTraffic Plus:

- OIML certified layouts available
- System can be enhanced with overview cameras and license plate recognition system
- Optional roadside cabinet with prewired backpanel for easy installation
- Vehicles are weighed accurately and reliably at all speeds
- Specific layouts for stop & go traffic available
- Different layouts for different accuracy requirements available

KiTraffic Plus – flexible for your applications

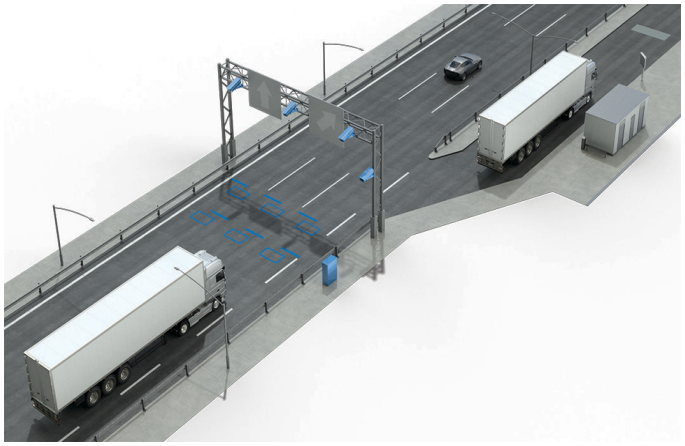
Kistler's KiTraffic Plus WIM system is based on a multiple sensor set-up that allows optimised measurement results. It can cover a virtually unlimited number of traffic lanes, with 2 to 8 Lineas WIM sensors and 1 to 4 inductive loops per lane.

For vehicle identification, the KiTraffic Plus can be enhanced with an overview camera and licence plate recognition system. These additional subsystems are controlled by the KiTraffic Plus system.

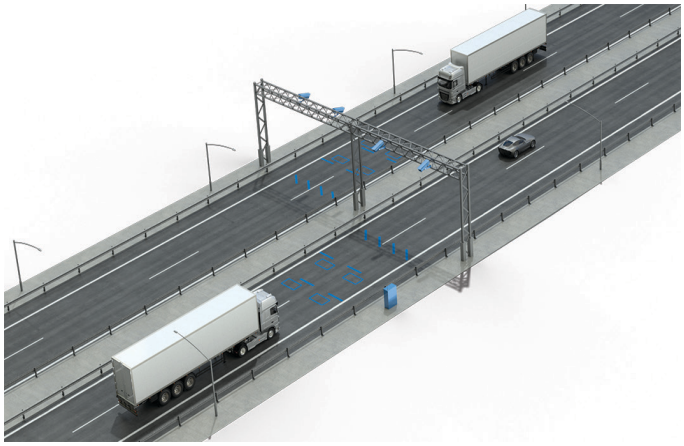
The outputs of all installed sensors and subsystems are processed by a central unit (PC) in the roadside cabinet and provided via the same user interface.

Lineas sensors installed in a tilted orientation can be used – besides measuring axle loads - for detection of single or dual tires on vehicles and hence provide far more accurate vehicle classification information. Furthermore, tilted Lineas sensors help to improve measurement accuracy by compensating for the lateral driving position of a vehicle.

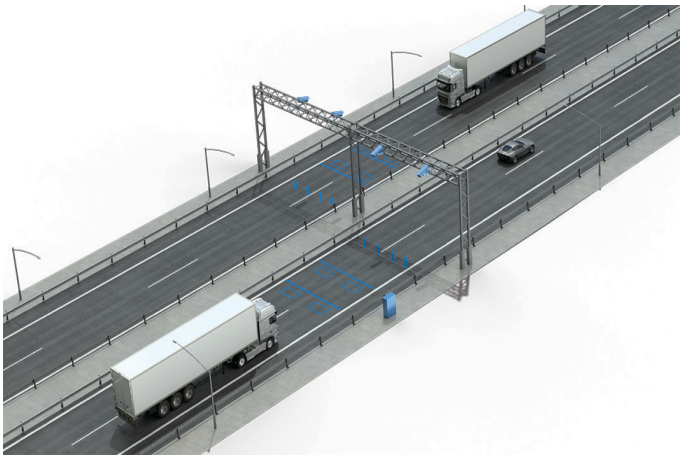
Optional roadside cabinets including a prewired backpanel with all relevant hardware facilitate system installation and commissioning.



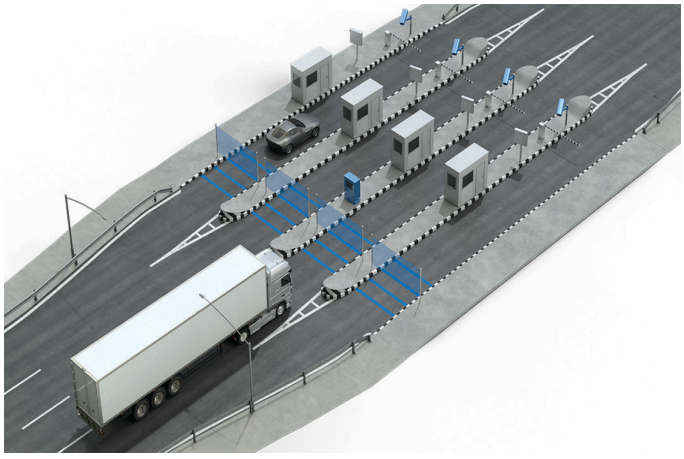
Preselection, basic system, typical GVW accuracy: 10 %



Direct enforcement, basic system, typical GVW accuracy: 9 %



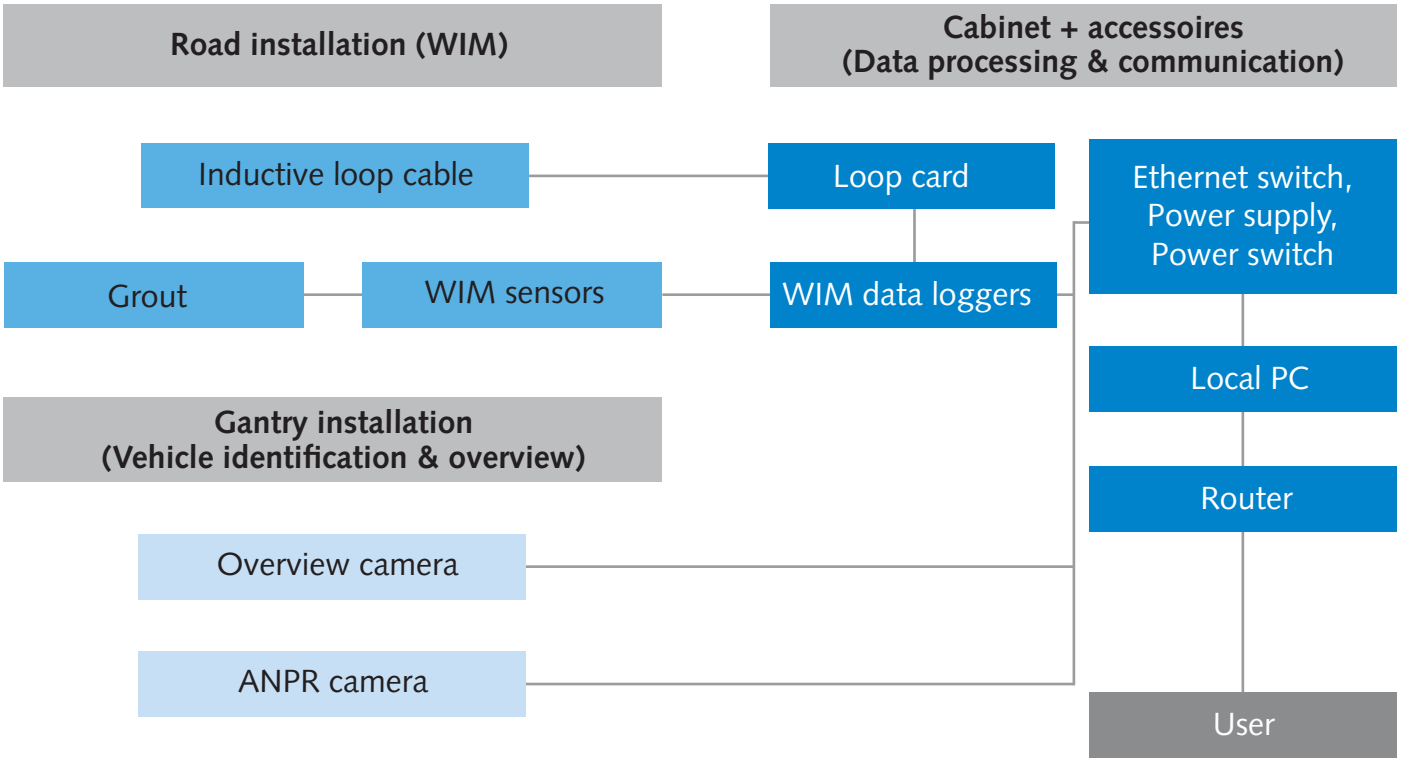
Direct enforcement, advanced system, typical GVW accuracy: 4 %



Toll by weight, advanced system, typical GVW accuracy: 2.5 %

KiTraffic Plus system architecture

Kistler's KiTraffic Plus system is flexible and can be tailored to the customer's needs. Kistler will guide you through the process of selecting the right components and subsystems for your application.



Key Characteristics of KiTraffic Plus:

- Unlimited lane coverage by integration of multiple WIM data loggers
- Optimised sensor layout for increased measurement accuracy and reliability
- Single / dual tire detection for detailed vehicle classification
- Cameras can be added for vehicle identification
- Prewired backpanel and roadside cabinet for easy installation and system integration
- Modern, web based user interface and machine readable REST API Interface

Find out more about our applications:
www.kistler.com/applications

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