KiTraffic Statistics: keep track of highways and bridges with Weigh In Motion

Valuable infrastructures such as roads and bridges need efficient monitoring, optimized maintenance and long-term development planning. How can all this be achieved? With automated systems to measure axle load and total weight – known as Weigh In Motion (WIM) technology. KiTraffic Statistics, the complete package from Kistler featuring the new Lineas Compact sensors, makes the job as simple as could be.

All over the world, traffic flows are soaring. Heavy and overloaded commercial vehicles are exerting extreme stress on roads that are often subject to aging, and on bridges that could easily collapse. A 30-tonne truck has the potential to cause just as much damage as 7500 ordinary passenger cars! Weigh In Motion systems by Kistler are the solution of choice for keeping track of road use, so operators can develop effective measures to protect and maintain bridges and highways. At relatively low cost, Kistler’s systems deliver informative data about vehicle numbers and classes, axle loads and total weight throughout their long service lifetimes.

WIM sensors: fast setup, easy installation
KiTraffic Statistics is a high-performance, coordinated Weigh In Motion system comprising Kistler’s latest Lineas Compact quartz sensors, the matching WIM data logger and all the necessary electronics – installed and wired, ready for use. Key product features and user benefits at a glance:

- Vehicle detection and classification, including weight data
- Wide measuring ranges for speed as well as weight
- Sensors are installed quickly and easily in the road paving
- Longer lifetimes thanks to innovative sensor installation below the road surface
- Unique, tried-and-tested quartz sensor technology
- Excellent cost-to-benefit ratio

How many vehicles are actually traveling along a road? How much do they weigh, and at what speed are they moving? KiTraffic Statistics answers all these questions – with exceptional cost efficiency.
The new Lineas Compact sensors (Type 9196) are installed two centimeters below the road surface. They are covered with a special epoxy grout to make the installation even more robust and durable. KiTraffic Statistics is supplied as a pre-wired system that includes the induction loop detector, power supply and connectors – so setup is exceptionally fast.

Flexible data acquisition via web interface or API interface
The WIM data logger (Type 5204A) in compact DIN rail format with an integrated charge amplifier has four or eight channels, and can be accommodated in the roadside control cabinet. It enables measurement of axle loads up to 25 tonnes on up to four lanes, with an accuracy of ±15% of the vehicle’s total weight. The web-based software makes it easy to configure and calibrate the system. All relevant measurement data is continuously visualized, with wide-ranging evaluation and analysis options. Alternatively, the Weigh In Motion system can be integrated into the operator’s own software environment via an API interface or WebSockets.

Holistic service concept to support Weigh In Motion
Kistler offers a comprehensive range of services to optimize the performance and life expectancy of its Weigh In Motion systems. The concept includes determination of the ideal position for the sensors, remote and on-site support with calibration, and product-specific installation training. Customers also have the option of extending the warranty period for all their Kistler WIM equipment for a period of up to 5 years.