



ITS Systems

M671/2 Weigh-in-Motion Systems



Golden River and Kistler joined forces to produce the most accurate and reliable WIM system under the COST 323 trials. As such, the combination of Golden River and Kistler is the only system to reach the higher levels of European compliance. The Lineas quartz sensor offers particularly high-accuracy weighing combined with durability and reliability.

Experience has shown these systems to be highly effective in a wide range of applications, including: data-gathering, identification for weight-limit enforcement and bridge-overload protection. All can be performed accurately and reliably at normal highway speeds.

Road Usage Data

Marksman 671/2 WIM systems will provide early warning when traffic volumes and loading exceed a road's design specifications.

Marksman units measure the downward forces on the road surface so they directly generate data about the factors that cause wear and deterioration of the road's surface and construction.

With traffic growth and congestion, many roads are subject to rapidly increasing traffic load and overloading. The Marksman 671/2 WIM unit will provide early warning of unexpected load and wear when deployed permanently on major routes or temporarily in particular problem areas. The traffic engineer is then able to plan maintenance on the basis of accurate road wear data.

Bridge-Overload Protection

Increasing traffic volumes and heavier vehicles have created a need to protect weak bridges from overloads, either from individual excessively-heavy or overloaded vehicles or from having too many vehicles on a bridge simultaneously.

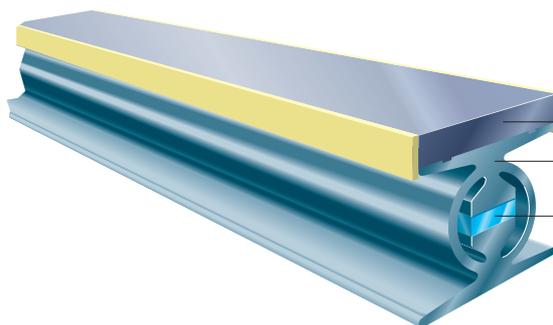
Golden River's Bridge Overload Protection System (BOPS) allows operators and authorities to keep their bridges open by protecting them from over-loading. BOPS offers a very cost-effective solution to the problems of how to protect weak bridges.



Bridge Protection System

Key features

- A proven superior performance under COST 323
- Vehicle by vehicle recording
- Kistler proven sensor technology
- Easy to use software
- Choice of data retrieval methods



- Force-introducing section
- Aluminium profile
- Quartz sensing element



Pre-enforcement Selection

Marksman 671/2 WIM systems offer major enhancements to the efficiency and effectiveness of vehicle weight enforcement operations.

The optimum time of day for enforcement programmes can be identified. Over-weight vehicles can be selected and identified by axle load, gross weight or classification type. Thus time can be saved by eliminating legally-loaded vehicles and allowing them to pass without being stopped.

Quartz Sensor for High-Accuracy Applications

For applications requiring high levels of weighing accuracy, the Lineas quartz sensor with the Marksman 671/2 is the high-performance option. An advanced quartz sensor, Lineas offers the highest levels of accuracy together with long life and provides an excellent level of system performance.

Lineas sensors are flush-mounted with the road surface and are thus de-coupled from horizontal and negative forces.

General Specification

Size
250mm x 145mm x 190mm

Weight
4.9kg

Temperature range
-40°C to +80°C

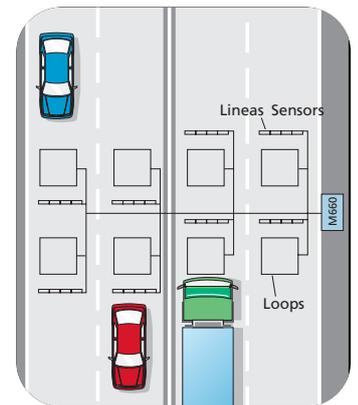
Environmental Protection
IP66 to EN60529-91

Vehicle Data
Vehicle gross weight and individual axle weights
Vehicle class
Vehicle length, wheelbase and individual axle separations
Vehicle speed
Inter-vehicle gap and headway
All data can be collected by lane or direction.

Surveys
Interval, vehicle-by-vehicle or interval and vehicle-by-vehicle simultaneously.



Golden River Marksman 671/2



Typical 4 lane weigh-in-motion installation

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World-wide Patents Coverage. All values are nominal.
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