Weighline

advanced rail vehicle weighing solutions

Weighline* delivers all the benefits of conventional train weighing methods – but much faster and at significantly lower operational cost.

A revolution in rail weighing...

Many of the world's major rail users already employ the system to keep track of their assets and to monitor safety. In fact, you'll find Weighline installations in almost every application and location including freight, aggregates, coal, steel, cement, extraction, petrochemicals, recycling and port authorities.

...from a name you can rely on

Weighline is manufactured by Railweight, which is part of the world-leading weighing company, Avery Weigh- Tronix. We have the largest number of in-motion rail weighing installations in global operation and offer a complete service including design, manufacture, installation and after-sales support.

Fast, no-fuss installation

Compared to traditional techniques, Weighline eliminates the need for expensive civil and rail costs and reduces the disruption associated with conventional installations.

Low cost from start to finish

The low initial investment, reduced installation time and low maintenance demands add up to economic through-life costs and a short payback time.

Greater information and control

Weighline provides precision data on train and wagon weights that can be interfaced with your business systems via a pc with Ethernet or most other networks. Reports can be linked to individual wagon, load and destination IDs to help you monitor deliveries to and from customers and suppliers.

Ensure safety – avoid penalties

By automatically detecting wheel, axle and wagon loads, Weighline helps you eliminate imbalance and overloading, ensure safety and avoid financial penalties.

Fully automatic operation

The system integrates with any Automatic Vehicle Identification (AVI) system – enabling you to monitor your entire stock automatically from a head office, terminal or network hub.

OIML approved

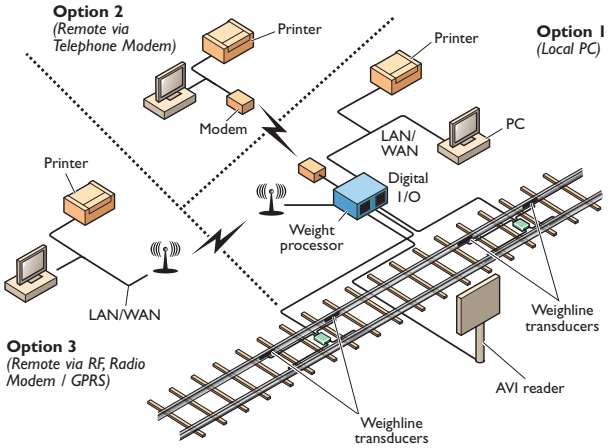
All in-motion Weighline systems meet OIML R60 and R106 conformity requirements for trade weighing applications and meet international environmental standards.

Static Weighing Applications

Weighline is also ideal for use with static load control systems where accurate weighing ensures that vehicles carry the desired capacity without overloading.

Low maintenance costs

Weighline is reliable and extremely durable. No moving parts mean the system is put onto a low maintenance schedule from day one.



Weighline weighing systems applications

The Railway industry employs Weighline Systems to weigh wagons coupled and in-motion for safety and commercial purposes, such as:

- Gross weighing trains on mainline tracks at running speeds of up to 110km/h (depending on application and desired accuracy class).
- Determining gross, tare and net weights at speeds allowed in shunting yards and sidings.
- Recognising mixed types of rolling stock with various numbers of axles, without operator intervention.
- Automatically discriminating between wagons and locomotives when only weights of wagons need to be recorded.
- Detecting damaging overloaded wagons, axles and wheels.
- Detecting imbalanced loads (end to end and side to side) for safety purposes.
- Determining toll and fine charges for generation of revenue.
- Invoicing commercial transactions (OIML Metrology Approved).
- Monitoring train circulation and weights in remote, totally unattended areas, combined with radio frequency Automatic Vehicle Identification (AVI), identifying wagons by their number and matching relevant weight data in a fully automatic mode.
- Transmitting data to a host computer for further processing.

RAILWEIGHT

Description

The Railweight Force Measurement Transducers have been specifically designed for rail weighing applications. They are manufactured from standard rail sections generally of the same type as used on the site of the installation.

Weighline transducers are designed for high performance and utilise techniques that minimise the effects of lateral (side) loading and temperature. The transducers have good accuracy and repeatability characteristics and can tolerate high dynamic overloads. Transducers are rated to IP 67 and can be used in harsh environments.

Weighline systems significantly contribute to:

- Improved track safety.
- Reduced track wear.
- Improved turn around time.
- Optimised traffic management by recording, storing, transmitting and allowing access to weighing and traffic data in real time.
- Improved fleet management.
- Increased revenue generation by providing paid, reliable and certified weighing service to track users.

Technical specification

Accuracy Class (OIML)		C1
Capacities (Emax)	kg	1500, 5000, 7500, 12500,15000
Max no. of divisions		750
Minimum load Emin	% Emax	10
Typical maximum safe overload	% Emax	200
Combined error	% Ro	< ± 0.07
Nominal rated output (Ro)	mV/V	0.5
Zero balance	% Ro	≤ ± 1.5
Temperature effect on zero	% Ro/° C	≤ ± 0.01
Temperature effect on sensitivity	% Ro/° C	≤ ± 0.01
Recommended excitation voltage	V	20
Maximum excitation voltage	V	30
Input resistance	Ω	750 ± 10
Output resistance	Ω	700 ± 5
Insulation resistance	MΩ	≥ 2000
Certified temperature range	°C	-10 to +40
Operating temperature range	°C	-40 to +70
Storage temperature range	°C	-40 to +80
Environmental protection rating		IP 67

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Your local distributor:

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