

# TRAILER

 KIMAX 1 spring



## Set includes:

### Kimax 1 trailer 2 SG sensors

Part number 10236

- 1 x display trailer
- 1 x sturdy stainless steel frame
- 2 x PN 10203 SG sensor
- Additional you must purchase gluing kit

### Kimax 1 trailer 3 SG sensors

Part number 10237

- 1 x display trailer
- 1 x sturdy stainless steel frame
- 3 x PN 10203 SG sensor
- Additional you must purchase gluing kit

## Trailer version - for trailers/semitrailers

Intended for use on trailers and semitrailers: The display is designed for mounting in a sturdy, waterproof stainless steel housing direct on the chassis.

## The scale you take with you ...

Kimax 1, the axle load measuring unit for economical and convenient supervision of axle loads on vehicles, trailers and semitrailers equipped with mechanical spring suspension system.

Kimax 1 calculates the current axle loads from the current strain in the axles and displays this figure as a three-digit value.

The SG sensors installed on the axles are connected to the display through extension cables and connectors.

## ... and warns when limits are exceeded

Kimax 1 has two separately adjustable alarm values. Exceeding alarm level 1 is indicated by a flashing display. Exceeding alarm level 2 switches in an internal relay. The relay signal can be used as ON/OFF input for another unit, for example an on-board computer or an external lamp.

Kimax 1 helps to achieve economical transportation, avoid fines and simultaneously optimizes the cargo weight.

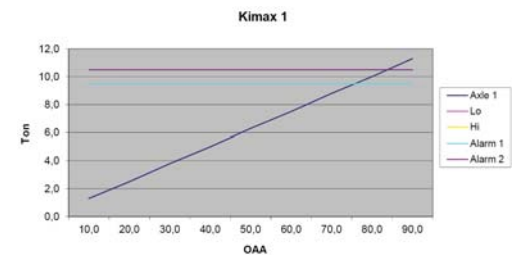
## Sensor configuration

On vehicles with two or three axles a SG sensor must be installed on each axle in order of measuring the load equalized between the axles.

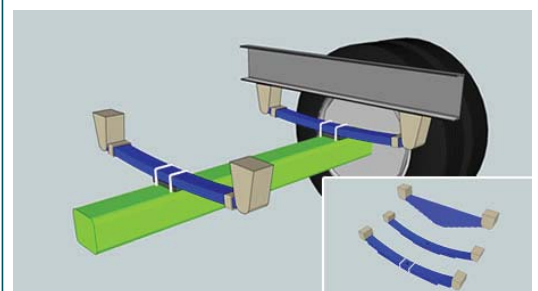
## Axle load measurement

Kimax 1 uses the linearity between strain in the axles and load of the axle group.

By using two reference points (empty weight and weight at maximum load) and the currently measured air pressure, Kimax 1 calculates the current axle load with an accuracy of 2 % of the maximum load.

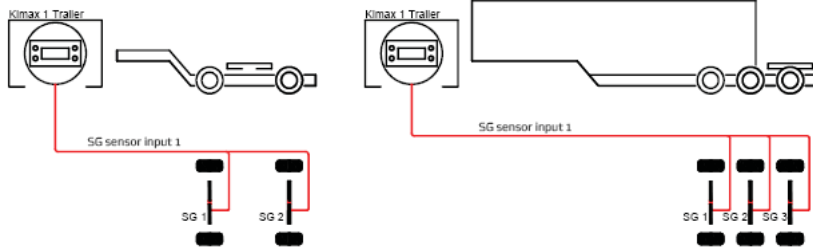


Depending on the load of the vehicle, the strain in top-side of the axle will increase, this strain is measured by a SG sensor on each axle.



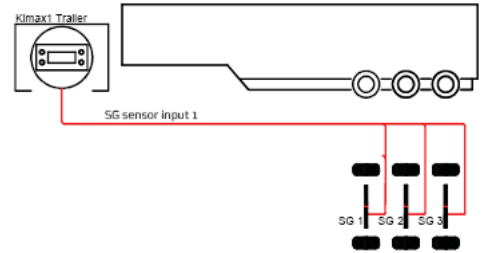
## 2 sensor spring-system P/N 10xxx

In this version, the reading is measured only on one of the two axes or as one axle group.



## 3 sensor spring-system P/N 10xxx

In this version (Kimax 1 standard version), you can calculate the reading for both sides of the axle. This provides additional measuring accuracy (arithmetic mean), particularly when the vehicle is inclined to one side.



### Display of reading

KIMAX has a three-digit 7-segment LED display. The decimal points can be set after the first or second digit or removed completely depending on range of your measurements.

Two modes of display can be selected:

- Automatic switch-off of display after approx. 2 minutes reading (Recommended in cabins)
- Continuous display (recommended on trailer/semitrailer) (factory setting).

### Optional versions:

**RS-232 serial output (option 1)** The Kimax 1 is available with a serial output in RS-232 format, offering you the displayed value in digital format intended for on-board computers.

**Analog output (option 2)** The Kimax 1 is available with an analog 0–5 V output corresponding to the displayed value you read on the unit. The output is intended for on-board computers or remote display purpose.

**Serial printer output (option 4)** The Kimax 1 is available with output for most common serial printers.

**Cabin version** Intended for use in driver's cab: The Kimax 1 display is supplied with a mount for simple installation on the dashboard.

### Other combination of truck and trailers:

- Visit [www.kimax.com](http://www.kimax.com) for more details and additional information.

### Technical Specifications

Supply voltage	10 ... 30 Volt direct current
Current consumption	max. 90 mA (with relay active)
Relay output	Normally open contact max. 1 A/ 30 VDC
Display	Three-digits 7-segment, LED, Character height 20.3 mm
Accuracy	2 % of maximum load at 0 °C - +50 °C
SG sensor	0 - 20 mA
Operating temperature	-25 °C...+70 °C
Storage temperature	-40 °C...+70 °C
Dimensions	175 x 135 x 90 mm
Weight	approx. 1650 g
Approval	CE and E1

### KIMAX 1

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*Sense -Tech Weighing Systems are used all over the world. From the hectic harbours of Amsterdam to the dusty outback of Australia. And everywhere in between.*