

SENSOR

KIMAX 2 AIR



Sensor Set includes:

Kimax 2 sensor 1 x 2 airinput
Part number 052000-0151

1 x sensor box, chassis
2 x air pressure throttle dia. 6mm
2 x T-fitting dia. Ø 8mm / 6mm / 8mm

Kimax 2 sensor 2 x 2 air input
Part number 052200-0151

1 x sensor box, chassis
4 x air pressure throttle dia. 6mm
4 x T-fitting dia. Ø 8mm / 6mm / 8mm

Trailer version - direct on your chassis

Kimax 2 sensor is a slave unit without display intended for communication with Kimax 2 radio or Kimax 2 universal through dvice bus.

The Kimax 2 On-Board Load Control is an electronic weighing system which can be used in all vehicles whose axles or axle groups are equipped with air suspension system.

Due to the modular construction, the product is very flexible and can be individually adapted to most vehicle conditions.

One tractor can easily shift from one trailer to the next without recalibrations

Sensor configuration

On all vehicles you get best accuracy with two independent air inlets for each axle, one for each pneumatic circuit (right and left) per axle or axle group, Kimax 2 calculates the current axle load on each axle from two reference values LO and HI pr axle.

A dual or triple axle group can be measured by one measuring channel, a 2-axle trailer needs a Kimax 2 sensor equipped with twomeasuring channels

Kimax 2 sensor has two seperately adjustable alarm levels

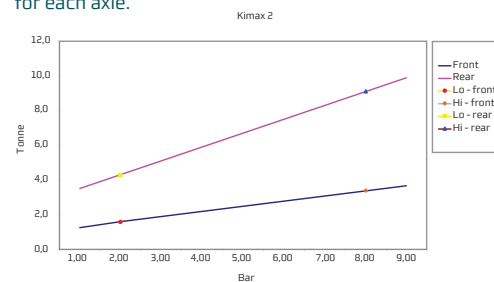
Alarm 1 is indicated by a flashing diode for the individual axle on the connected Kimax 2 radio or Kimax 2 universal display unit.

Alarm 2 which switches in an internal "relay" when the total weight for this vehicle is exceeded. The relay signal can be used as ON/OFF input for a warning lamp or another unit, for example a tracking GPS or an on-board computer.

Axle load measurement

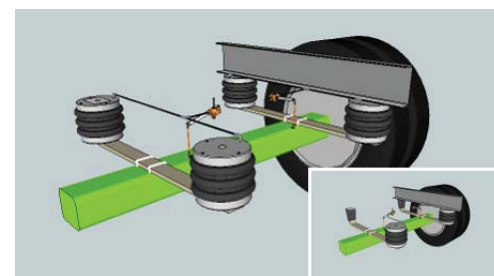
Kimax 2 uses the linearity between air pressure and load of the single axles and mechanical "strain" in the axles.

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



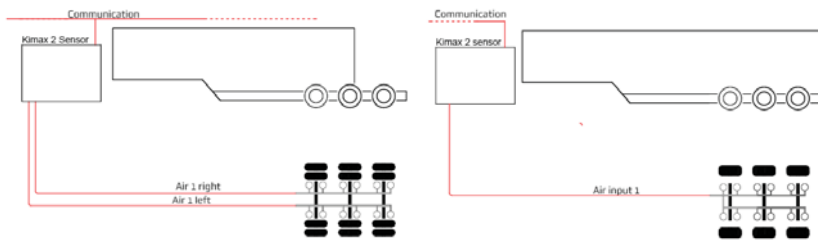
Basic operation

Depending on load of the vehicle, the level valve maintains a constant height of the chassis above the ground surface by regulating the pressure in the air bags.



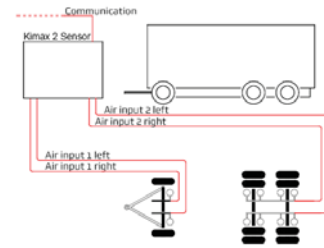
Basic semitrailer installation with dual or triple group

Dual or triple group trailers can be managed as single trailer connected to a tractor head unit as well as the trailers can be managed as an interlink configuration .



Basic trailer installation 2-axle

Each axle or axle group call for it own measuring channel. A 3-axle trailer equipped with a single front axle and a doubler axle group needs three SGsensors, one on each axle



Air circuits and sensors

On all vehicles you get best accuracy with two independent air inlets for each axle, one for each pneumatic circuit (right and left) per axle or axle group, Kimax 2 calculates the current axle load on each axle from two reference values LO and HI.

- When less accuracy is enough for you, one air inlet on each axle or axle group is available too.

Optional versions:

Kimax 2 is exactly as flexible as your vehicle:

- Do you have a tractor equipped with steel springs on front axle and air suspension on rear axles combined with a lift axle? No problem!
- Do you have a truck with 2 front axles equipped with steel springs and two rear axles divided in left hand and right hand air circuits? No problem!
- Do you want to couple a trailer or semitrailer on the above vehicles, we do it!
- Do you want to couple a low bed trailer equipped with hydraulic suspension on a tractor equipped with air suspension? No problem!
- Do you want to swap from one trailer to another trailer, you just do it! Individual calibration values are stored in the Kimax unit on each vehicle.

Associated units

Kimax 2 sensor is a slave unit which is able to communicate with both Kimax 2 radio and Kimax 2 universal

Visit www.kimax.com for more details and informations.

Technical Specifications

Supply voltage	10 ... 30 Volt direct current
Current consumption	max. 90 mA
Alarm 2	output open collector NPN max. 0.2 A/ 50 VDC
Measuring accuracy	2 % of maximum load at 0 °C - +50 °C
Air connection	Quick release connection, 6 mm hose
Maximum pressure	15.5 bar (225 psi)
Operating pressure	range 0 to 10.5 bar(0 to 150 psi)
Device bus	Power line communication
Operating temperature	-25 °C...+70 °C
Storage temperature	-40 °C...+70 °C
Dimensions	180 x 135 x 60 mm
Weight	approx. 750 g
Approval	CE and E1

KIMAX 2

Kimax 1 and Kimax 2 are a series of high quality well proven on-board scales for use on trucks, buses and loading equipment. For detailed product selection guide please go to Kimax.com. Kimax 1 and Kimax 2 are registered trademarks owned by Sense-Tech Weighing Systems.

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.