



QuikMec + II

On board scale for
mechanical and or air
suspensions

CLÉRAL's **QuikMec+** redefine electronic onboard scale technology. This small, affordable, state-of-the-art scale gives you precision weight measurements within 1% of actual vehicle weight.

The **QuikMec+** can be used on any air, spring, or hybrid suspension vehicle.

With its 4 channels, you can obtain gross or net weight for each axle groups or total. Therefore B-Trains can now be equipped with high precision scale systems.

The CLÉRAL calibration assist software makes the system easy to calibrate. The system indicates which operation to carry out, in order, to assure accurate systems calibration. The systems is also tolerant of rugged terrain and can be calibrated on non-level surfaces.



99% Precision

CLÉRAL's integrated power conditioning and circuit protection hardware assure reliable system operation and accurate weight measurement

Description

Operation

This scale measures axial deformation of spring suspensions and/or pressure of air suspensions then converts them into weight measure readings.

Installation

Simply install the display unit in the cab and connect power supply and sensor cables. See separate descriptions for installation of mechanical and air sensors.

Technical Characteristics

Display unit

Supply current : 9Vdc to 36Vdc
Amperage : 0,1Amp
Dimensions : (L x H x D) : 14cm X 7cm X 5cm
Display unit : Variable intensity digital
Displays : Gross or net weight
 Total or per channel
Channels : 2 (3 / 4 Optional)

Integrated air sensors

Durability : Resistant to chemical products
Resolution : 0.03 PSI
Bursting pressure : 460 PSI
Operating temperature : -40°C to 80°C
Adapters : 1/4 Push-ins



QuikAirII

On board scale for air ridden vehicles

CLÉRAL's QuikAir systems redefine electronic onboard scale technology. This small, affordable, state-of-the-art scale gives you precision weight measurements within 1% of actual vehicle weight.

Only CLÉRAL can offer a scale system that can be installed in less than an hour.

QuikAir can be used on any air-ridden vehicles. With up to 4 input channels, you can obtain gross and net weight for each axle group. Therefore B-Trains can now be equipped with high precision scale systems.

The CLÉRAL calibration assist software makes the system easy to calibrate. The system indicates which operation to carry out, in order, to assure accurate system calibration. The system is also tolerant of rugged terrain and can be calibrated on non-level surfaces.



2 Integrated Air Sensors

99% Precision

CLÉRAL's integrated power conditioning and circuit protection assure reliable system operation and accurate weight measurements,

Description

Operation

This scale, with its integrated sensors, measures air pressure from the suspension to calculate Vehicle weight.

Installation

QuikAir's installation is easy and quick. Simply mount your scale in the cab then connect airlines from the suspension systems and power supply wires.

Technical Characteristics

Display unit

Supply current : 9Vdc to 36Vdc
Amperage : 0,1Amp
Dimensions : (L x H x D) : 14cm X 7cm X 5cm
Display unit : Variable intensity digital
Displays : Gross or net weight
 Total or per channel
Channels : 2 (3 / 4 Optional)

Integrated air sensors

Durability : Resistant to chemical products
Resolution : 0.03 PSI
Bursting pressure : 460 PSI
Operating temperature : -40°C to 80°C
Adapters: :1/4Push-ins



Pneumatic Sensor

Air sensor for air ride vehicles

CLÉRAL's pneumatic unit has been developed for air suspensions on tractors and semi-trailers.

A product of advanced technology, CLÉRAL's pneumatic sensor is resistant to chemical products such as methanol and all other products used in suspension maintenance. Due to their durability, these sensors can be relied on for a longer period of time than any other sensor on the market.

CLÉRAL's pneumatic unit is so advanced that it will measure the weight of your truck with great precision.



Description

Operation

The unit measures air pressure of the suspension and transmits the data to the display module, which converts it into a weight measure.

Installation

Installation of CLÉRAL's pneumatic unit is easy and quick. Simply attach it in the cab and connect an air line between the unit and the suspension. Connect to display unit.

Technical Characteristics

Electronic unit

Supply current: 9V dc to 36V dc

Recommended 12Vdc

Amperage : 0,1Amp

Dimension (L x D) : 15cm X 4cm diam

Pneumatic Sensor

Durability : Resistant to chemical products

Resolution : 0.03 PSI

Bursting pressure : 460 PSI

Operating temperature : -40°C to 80°C

Adaptor: ¼" Push-in



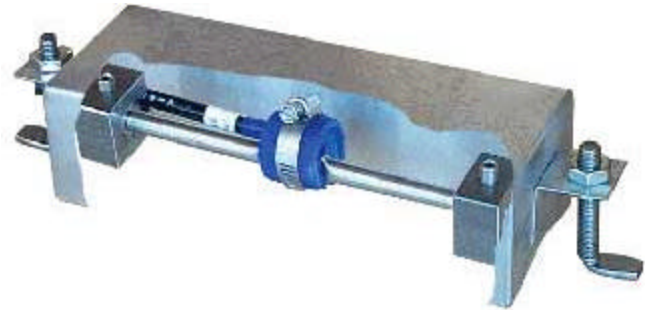
Mechanical Sensor

Sensor for Mechanical
(Spring) Suspension

CLÉRAL's exclusive mechanical sensor was developed for mechanical suspensions on tractors and semi-trailers. The installation of these sensors does not require any modifications to the vehicle.

It's very high sensitivity makes it the most precise axle sensor on the market.

Stainless Steel materials combined with a high tech sealing procedure provides CLÉRAL's sensors long time reliability.



Cable jacket and connectors are made of polyurethane and are resistant to alkaline, water, and acids.

Description

Function

The sensor measures axle deformations and transmits the data via the multiplexer to the display unit. The software in the display unit converts this measurement into a weight measurement.

Installation

Two small mounting blocks welded to the axle or equaliser beam is all that is needed to attach the sensor. Insert sensor in the blocks and pre-tension using the hand held read-out unit. Attach cable to the sensor and install the protective cover. Connect other end of the cable to the multiplexer which is connected to the display unit.

Technical characteristics

Mechanical Sensor



Resolution : 0.25 micro strains
Operation scale : 3000 micro strains
Operating temperature : -40°C à 80°C
Dimension: 6.00"x0.5" Diam.

Cable and connectors

Polyurethane jacket
Operating temperature : -51°C à 80°C



Multiplexer

Electronic unit for
mechanical sensors

The CLÉRAL multiplexer drives the mechanical sensors, used for measuring the weight of spring and tension type suspension systems.

This multi-sensor interface offers great sensitivity, precision, and speed.

CLÉRAL's multiplexers are available with 2 to 6 connections depending on the number of sensors installed on the truck or trailer.

The system has an integrated electronic key system that allows the same multiplexer to be used with several different truck / trailer configurations.

Digital data transmission is used in the multiplexer to assure accurate and reliable weight measurements regardless of the operating environment. EMI / RFI and Length of Cable do not impact system performance.



Description

Function

The multiplexer precisely measures mechanical deformations of every sensors installed on the suspension then transmits these measurements to the display unit which then converts these readings into a highly accurate weight.

Installation

The multiplexer can be installed either in the cab, on the frame of the vehicle, or on a trailer.

Technical Characteristics

Electronic Unit

Supply Voltage: 9Vdc to 36Vdc
Recommended 12Vdc
Power consumption: 2.5 watts Amp
Fully sealed stainless steel enclosure
Dimension: 4.50"x4.50"x1.60"

Digital communication
Durability: Resistant to chemical products
Resolution: 0.1 Micro strain
Operating temperature: -40°C à 80°C



Unlimited Swapping Electronic Key

Calibration Data
Memory Key for
QuikMec+II

Unlimited swapping without recalibration is now available with the **QuikMec+** on board scale.

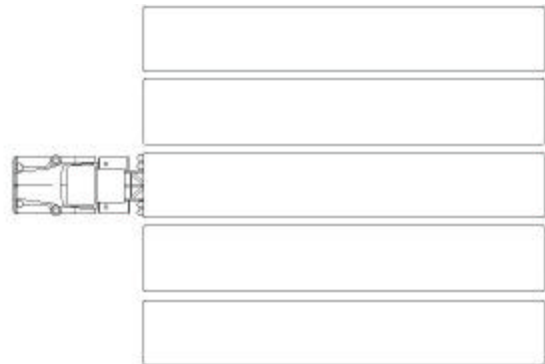
CLÉRAL's **Electronic Keys** are designed to eliminate recalibration of the trailers when swapping.

Once calibrated, the key identified to a dedicated instrumented trailer, may be stored with the registration papers of the trailer for easy access.

Simply plug electronic key in the memory module receptacle then turn on display unit and you're ready to load.

This affordable option has no limit. It can be adapted to any tractor-trailer configuration for small or large fleets.

No additional exterior boxes or parts required. All that is needed is the very small key and the memory module mounted inside the cab.



Description

Operation

This key is used to permanently store trailer calibration data. Plug in and turn on display unit.

Installation

A small device is connected to the display unit serving as a receptacle for the key.

Technical Characteristics

Key

Lightweight nylon connector
Fully sealed for extra protection
Trailer I.D. tag supplied

Memory module

Small potted black box
Receptacle for connector