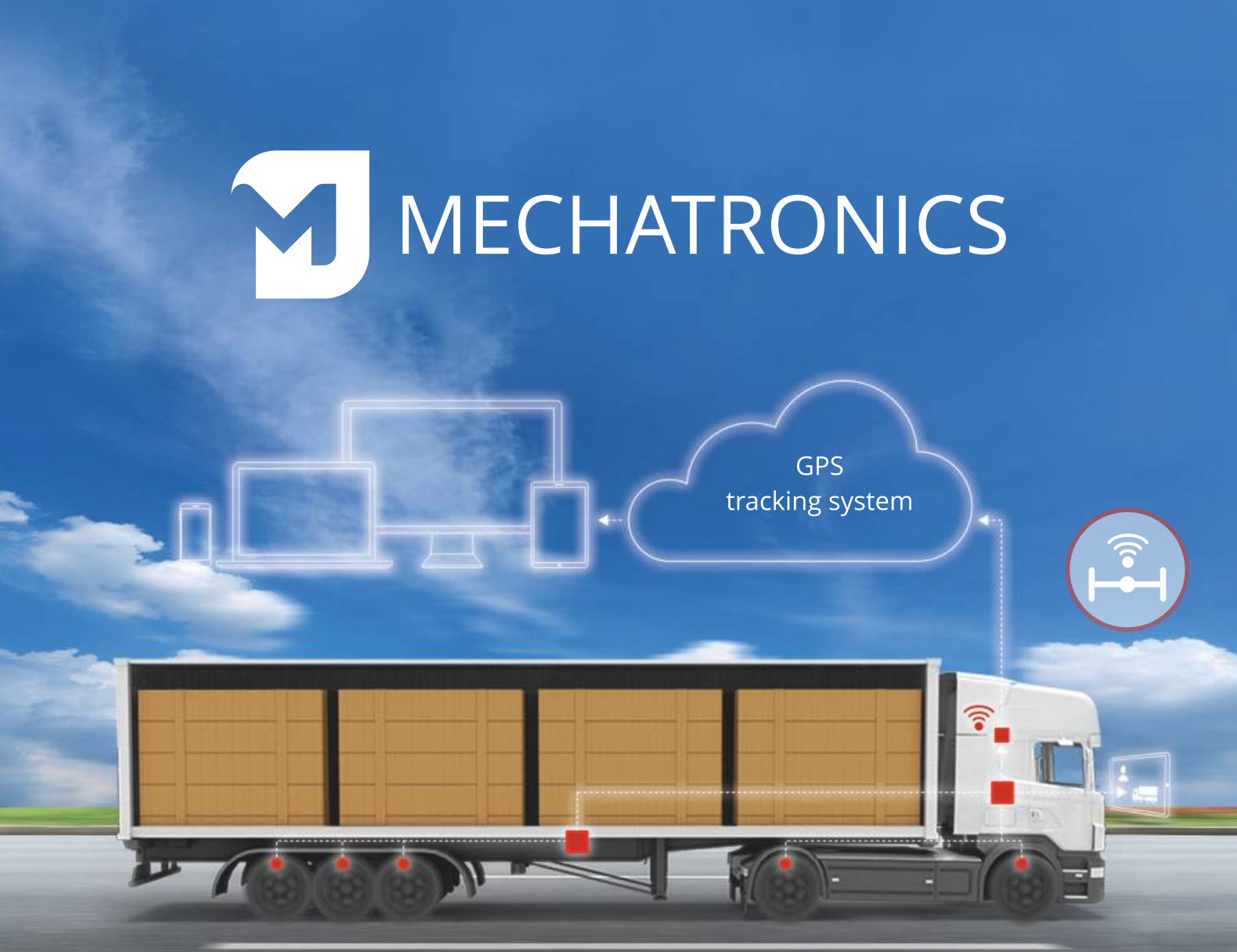
MECHATRONICS



Onboard weighing systems 2022

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Eliminates overloading and traffic fines

Saves manpower and time as driver controls correct load

Prevents excessive wear

Monitor the places of loading/offloading

Advanced fleet management

Track location

Axle load monitoring

Cargo weight monitoring

Real fuel consumption

Temperature and humidity measurement

Door sensors

Tire pressure monitoring

Driver identification

Driver scoring

Driver mobile terminal

Onboard weighing system eurosens Difference

eurosens Display RS

Polls sensors and display axle load/cargo weight information. Interface to a GPS tracking system.

Smart axle load sensors eurosens DPS/DDS/DSS:

Measure axle loads, stores calibration and vehicle/trailer parameters.

eurosens DPS

Axle load sensor for vehicles with air spring suspension.
Measurement error 2%

eurosens DDS

Axle load sensor for vehicles with leaf spring suspension.
Measurement error 10%

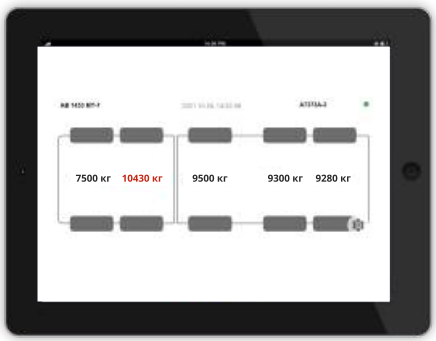
eurosens DSS

Universal high-precision axle load sensor for any vehicles.
Measurement error 2%

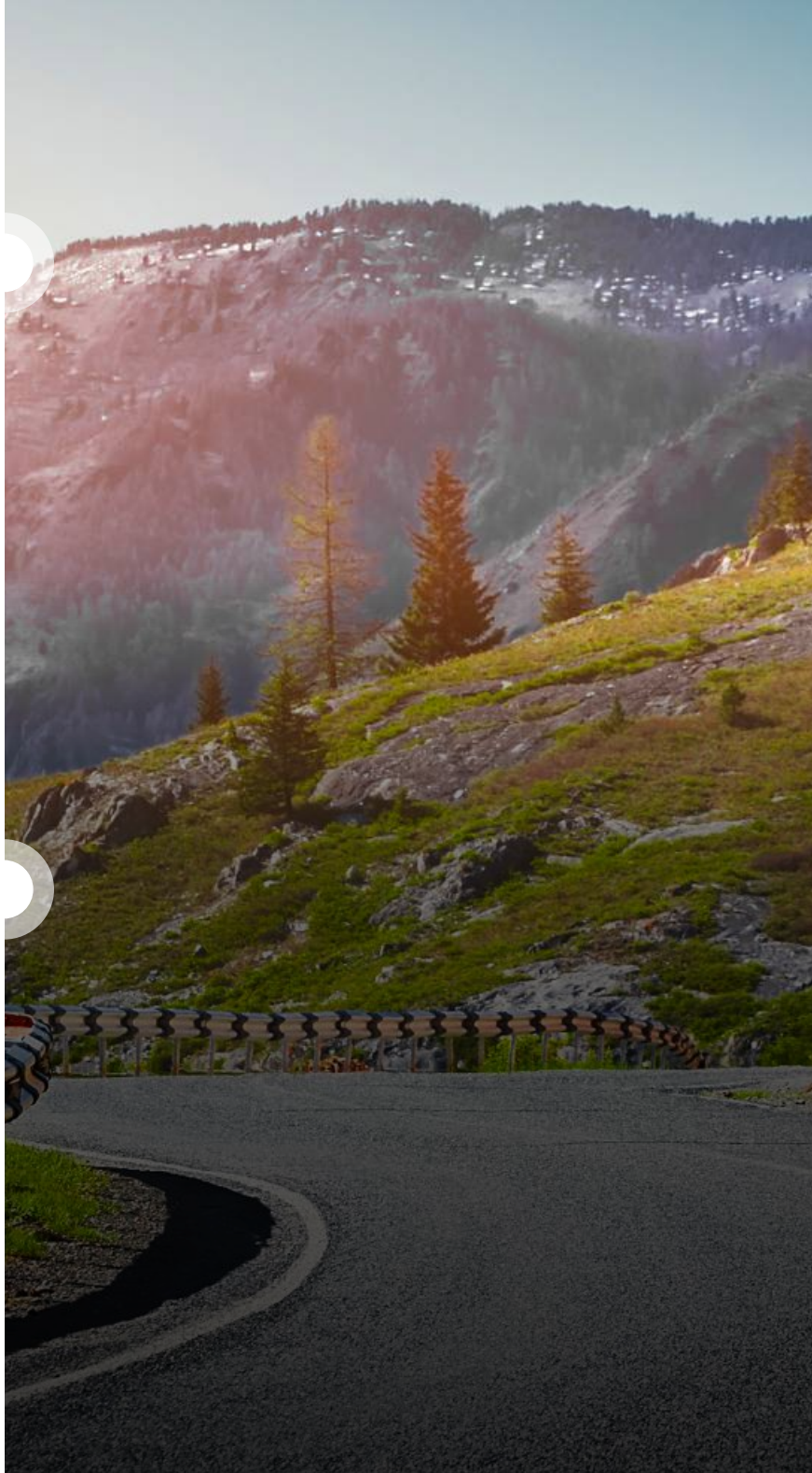
eurosens Display RS

Measures cargo weight, displays information to a driver and sends data to GPS tracker

OWS-truck : Android application

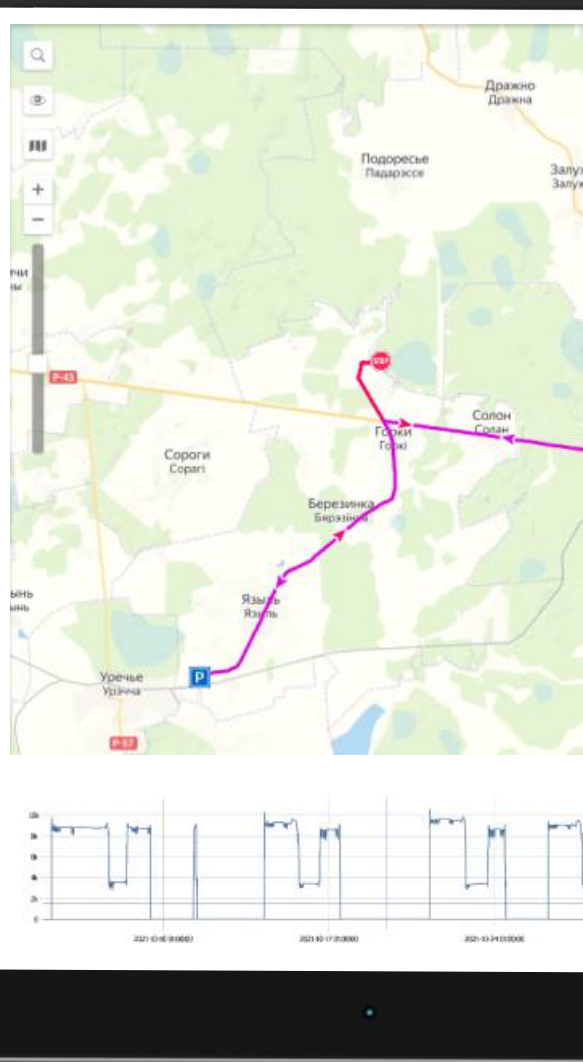


- Receives an information from GPS tracker via Bluetooth
- Displays axle loads, cargo weight, total weight
- Stores the truck/trailer dataabse, can be moved between vehicles.



GPS tracking cloud platform

- Vehicle route history
- Cargo weight history
- Loading/unloading cargo places and reports
- Travelled distance, real fuel consumption information
- Monitor the parameters of driving (speed, temperature, rpm and more...



Onboard weighing system : truck and trailer with air suspension.

Onboard weighing system : truck with leaf spring suspension.

Frequently asked questions

How much does the onboard weighing system cost?

The cost highly depends on the system configuration. We have to answer these questions first:

- Do we need to measure the cargo weight or axle loads only?
- Are there semitrailer/trailer, if yes, it is possible for trucks to swap trailers?
- How much axle load sensors we have to install ?
- Do we need onboard driver display or not?
- With these answers we can define the configuration of onboard weighing system and calculate its cost

What is the accuracy of onboard weighing system?

The accuracy depends on sensor type, quantity of sensors, vehicle configuration and design and type of cargo.

Based on our experience we can assume that axle load for the vehicle with air suspension can be measured with 95-99% accuracy (relatively to maximum axle load), for the vehicle with leaf spring suspension with 95-98% (using Eurosens DSS sensor). For vehicle standing on a horizontal surface.

What are the installation features of onboard weighing system?

- Pressure sensors eurosens DPS are connected to the pneumatic line of air suspension.
- eurosens DSS sensors should be welded to the axles.
- After installation we should calibrate the sensors. For sensor calibration truck scales are used. We have to measure real axle load for each axle by scales and save these data into calibration table. Repeat procedure for an empty and fully loaded condition. TThe caliub.
- The calibration procecude can be made later during vehicle operatoin.

What display we can use in the driver's cab?

eurosens Display RS or Android device (with specific GPS tracker "Smart")

Does it compatible with my GPS tracker?

TCheck if your GPS tracker has these features:

- It has the RS485 interface
- RS485 interface supports LLS protocol (fuel level sensor)
- Maximum supported number of LLS sensors more than 6.

Some examples : Navtelecom. Galileosky, Xirgo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