

# AirBoxOne<sup>™</sup>



AirBoxOne™ provides multiple solutions to raise your trailer's IQ. It combines Drōv's proven and patented tire management system with smart electronic technology to unify trailer sensors into one integrated, user-friendly platform. Using wired and wireless technologies, AirBoxOne provides the most robust platform for aggregating smart solutions and sensors around the trailer, today and in the future. This way, key operational and safety information flows directly from the vehicle to the fleet and the driver. AirBoxOne also goes beyond tire-pressure monitoring, providing integrated and electronically controlled tire management that inflates and deflates based on load. AirBoxOne doesn't stop there: Additional sensors, cargo and rear view cameras detect everything from wheel end temperature and load weight to extreme G-forces and cargo security breaches. Through the Vehicle Health Display, the mobile app and the web dashboard, alerts and notifications are wirelessly communicated to the cab and stored in the Cloud, making pre- and post-trip checks more efficient. AirBoxOne assists the driver today and is uniquely positioned for an autonomous future.

# **CAPABILITIES**

Drōv delivers a comprehensive smart trailer solution by integrating smart components and sensors into the trailer through its AirBoxOne platform. AirBoxOne can read any sensor on the trailer, change and control tire pressure, enable camera setups on the trailer, and connects to the truck. With all that data gathered, Drōv relays diagnostics in real time to the driver and to the fleet, enhancing safety, security, tire life, fuel economy and operational efficiencies, all while reducing maintenance cost and downtime.

Drōv's AirBoxOne brings to the market a first-of-its-kind open and agnostic platform, a central gateway able to connect to a myriad of sensors and integrate with other third-party smart solutions around the trailer. One subscription, one comprehensive solution.

Fleets can leverage this data to improve preventive maintenance, increase operational efficiencies and asset utilization, decrease maintenance costs, and improve their safety record. Drōv helps fleets more effectively manage their rolling assets and gain confidence that they are being operated safely on the road. All of this becomes ever more important with the future expectations of operating fully autonomous trucks, which would in effect remove the driver from the cab. That will make a full communication link between the trailer and the truck nothing less than essential.

## **RETURN ON INVESTMENT**

With AirBoxOne, you'll realize a measurable return on your investment, thanks to gaining significant operational, financial and safety benefits, including:

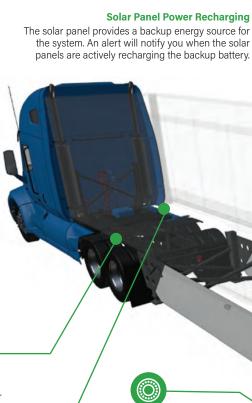
- Enhanced proactive maintenance practices and timing using real-time data
- · Increased load efficiency and capacity
- Reduced cost-per-mile and lessened potential for roadside incidents
- Improved asset utilization by locating and deploying idle or underutilized assets
- · Reduced potential CSA violations and costly downtime, which could result in missing delivery requirements
- Extended life of your trailer assets
- Improved service to YOUR customer

Deploying AirBoxOne on your fleet of trailers will provide you with real-time, actionable information and answers to questions you didn't even ask!

# AirBoxOne PROVIDES MORE DATA TO

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Drov's AirBoxOne features state-of-theart technology. This system captures and sends multipoint operational data to your logistics center. Adding Drov's AirBoxOne to your fleet brings a new level of analytics to your operation's bottom line. The system provides multiple solutions to make trailers smart and can be customized to meet the specific needs of a fleet.



#### Vehicle Speed & Accelerometer

The system monitors real-time vehicle speed. The accelerometer allows monitoring trailer movement when unconnected to tractor power or air-connected and also monitors for harsh impacts.



#### **GPS Location & Route Tracking**

Real-time GPS tracking occurs when the vehicle is running. Live trips can be monitored, and all trailer trips are stored for retrieval as needed. The system will also keep a record of the number of days parked.

\*Smart Solutions in field testing



#### **Automated Tire** Inflation/Deflation

Individual tire PSI levels are monitored against the PSI setpoint designated by the fleet. The driver and fleet will be notified when the PSI level differs from the setpoint and the system will automatically adjust the level up or down as required. Tire inflation/ deflation is available through the Drov system and has the capability to integrate with other providers.



#### **Brake Pressure Monitoring**

**Temperature & Vibration** AirBoxOne integrates with SKF TraX Wheel End System to monitor wheel end vibration and temperature.

Wheel-End

AirBoxOne integrates with the brake air supply system to monitor both parking and service line pressure for the system.

#### **Advanced Brake Pressure Monitoring**

AirBoxOne integrates with advanced brake applications, such as the HDNABI Smart Brake Chamber, to monitor parking and service brake pressures at each individual wheel end.



#### **Air Tank Pressure**

AirBoxOne monitors the air tank pressure.



AND THIS IS JUST THE BEGINNING...TALK TO US ABOUT HAVI

# YOUR OPERATION



NG AirBoxOne™ INSTALLED ON YOUR TRAILERS WITH YOU

# **VEHICLE HEALTH DISPLAY**

Drōv provides an additional way to immediately view health data from the AirBoxOne using the externally mounted Vehicle Health Display. The Vehicle Health Display provides the monitored health status of the trailer at the press of a button. Health status for tires, lights, door position and ABS, as well as cargo image are displayed. This data indicates the readiness of the trailer and can be used to facilitate the following:

- Driver Pre-Trip Inspection Display
- Maintenance & Service Communication
- Yard Check Inspection Display
- Cargo Camera Image Display







# **CLOUD** COMMUNICATIONS

Receive real-time health alerts whenever there is a change in conditions as detected by the various sensors configured with AirBoxOne. These alerts, along with real-time information on trailer status, location, etc. are transmitted via secure Cloud communications to authorized Drōv web-based mobile or desktop users, and provided to fleets via an available software API. The driver will be notified via mobile app when system alerts are triggered for issues with tire pressures, brakes, hubs, lights out, door position and other warnings. Through the rear-view camera and ultrasonic sensors, drivers and



AirBoxOne primarily runs on auxiliary power and has a backup battery and solar charging. These three power sources are redundant to make sure the system can always function. Whether due to a worn-out socket, a bad cable or a blown fuse in the tractor, sometimes auxiliary power is either intermittent or not available. The solar power charges the backup battery in absence of auxiliary power and allows for frequent wake-ups of AirBoxOne when the trailer has been sitting on location for longer periods of time.

autonomous power units now have visibility behind the trailer.



Innovation begins with disruption

— new ideas, novel approaches and evolved expertise. We are innovators in the smart truck and trailer movement, creating solutions for every type of fleet.

Our mission is to deliver future-facing, durable systems to enhance client profitability and safety.



**Technology for the Long Haul** 

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