

# Trailer Tracking

Monitor the location, mileage and security of your trailers



FleetMind's Trailer Tracking technology boosts productivity and equipment utilization by providing information on the location of every tractor and trailer in the fleet. Fleet managers will have total visibility into their tractors, drivers and loads. The Trailer Tracking module is integrated with the FleetMind onboard computer, and the tracking data is displayed through the FleetMap and reporting modules. The data is also sent to the back office system. Dispatch can easily track the last known status of any disconnected trailer.

## Key benefits:

- 24/7 visibility into trailer location, status and security
- Reduced security overheads, vehicle losses, load shrinkage and insurance premiums
- Improved fleet utilization through real-time visibility of the tractor and trailer locations
- Sensor options for temperature controlled distribution and door sensors for unauthorized entry
- Tracking of up to 3 devices at once - 2 trailers and the dolly
- Mileage tracking for maintenance planning
- Tracking of trailer movements in the yard
- Easy to install; installs in less than 15 minutes

## How Trailer Tracking Works

A Power Line Carrier (PLC) device - the PLC Identifier - is installed in each trailer. PLC technologies transmit digital data onto the vehicle's power line and allow tractor to trailer communications without adding any new wires. This device is programmed to contain the trailer identification.

Another PLC device - the PLC Reader - is installed in the cab, and reads the data from the trailer ID. This data is published via the ECM to the FleetMind onboard computer. When a trailer connects, a trailer attach activity is generated, and when a trailer disconnects, a trailer detach activated is generated. Both those activities include the trailer identification. These transactions are relayed to the back office, so dispatchers know whether a trailer is connected or disconnected, and can act promptly should the wrong trailer be attached to a vehicle. All information is duly stored in the related database.

The Fleetmap module provides the trailer location information, which can be tracked in real-time when attached to a vehicle. The Trailer Tracking solution also stores the date, time and GPS position of all drop and hook activities.

## Components:

### PLC Identifier

The PLC Identifier, once installed on a tractor or trailer, will send out the vehicle's Identification Number at regular intervals onto the vehicle's power line. This ID can be used to determine the hook and unhook times of the trailer. In addition, it can give positive confirmation that the correct trailer is hooked up to the correct tractor in real-time. The whole identification process is done automatically without any inputs from the driver. The PLC Identifier also has one digital input which can be used for a variety of other functions like letting the driver know if a trailer door is open, if the temperature of a refrigerated trailer is too low, when tire pressure is too low, or other functions.



### PLC Reader

The PLC Reader reads the PLC Identifier, which is installed in the cab of the truck, through PLC messages and converts them to a serial interface. This allows the vehicle's Identification to be read by a wireless or other serial interface equipped device installed on the vehicle. Once this conversion is made, any wireless device, on the tractor or trailer, with a serial interface can transmit the vehicle's ID to the control center. Here, everything from the location of the truck, the time of hook-up, the time it left, until the disconnect time can be monitored in real-time. The PLC Reader also has three general purpose analog inputs.



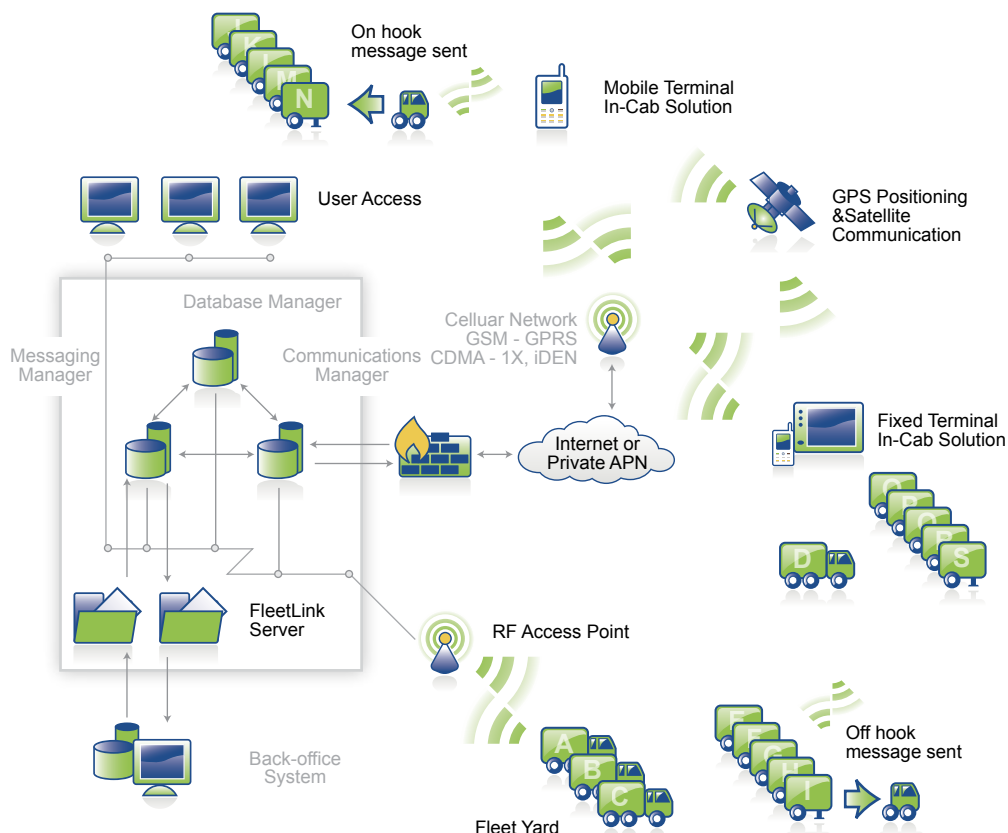
## Applications

The following information may be passed along to the wireless communicator:

- ABS Warning Information
- Tire Pressure Information
- Trailer Temperature
- Trailer Door Status
- Engine Data to Wireless Transceiver Located on Trailer
- Information to Driver Received Through a Wireless Transceiver
- Cargo Status

## Specifications

- Supply Voltage: 9 to 16 VDC
- Reverse Battery Protection
- Load Dump Protected
- Double Battery Protection
- Reverse Transient Protection
- Operating Temperature: -40° to 85° C
- Storage Temperature: - 40° to 85° C
- Physical Dimensions: 2.75" L X 2" W X 0.5625" H



Proprietary Fleetmind Solutions



**FleetMind Solutions Inc.**  
Putting YOU in your driver's seat  
www.fleetmind.com | 888 639 1666 ext. 350