

# FleetReefer Refrigerated Trailer Management Solution

Ayantra - a leading developer of remote asset management products - has created a solution for managing refrigerated trailers

# The Challenge:

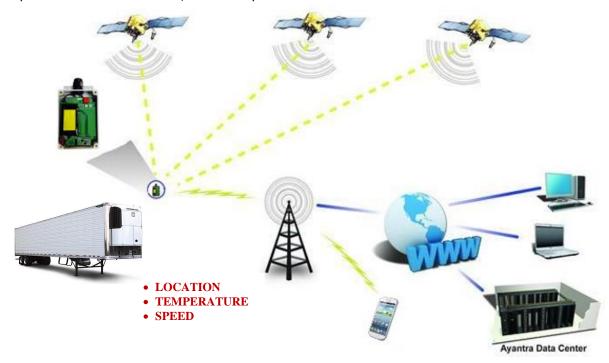
Refrigerated trailers carry valuable and perishable cargo. To protect the trailers and their high-value contents, effective fleet management is critical. Fleet managers must understand each trailer's location and its compliance with temperature control objectives. Unfortunately, current methods for managing trailers are often expensive, inefficient, time-consuming and ineffective.



Managing a fleet of refrigerated trailers is a difficult task. Ayantra can help.

#### The Solution:

Ayantra's FleetReefer is a web-based wireless solution for managing refrigerated trailers. FleetReefer can support any make or model of refrigerated trailer, including hybrid fleets. It provides timely information about each reefer's Location, Status, and Temperature. FleetReefer can send real-time Alert Notifications if the user-specified Temperature Limits are violated, or if other problems occur.



The complete solution consists of:

- An Ayantra monitoring unit installed on the reefer. The monitoring unit includes a GPS system, a cellular radio, a GPS/Cell antenna, and a temperature sensor.
- Wireless communications services provided by Ayantra
- An Ayantra-provided website to deliver Temperature Graphs, Location Reports, Status Reports, Maps, History Logs, and other management info. The website can issue real-time Alert Notifications if any problems occur, including Temperature Violations and Speed Violations.

Ayantra, Inc. 47873 Fremont Blvd. Fremont, CA 94538 Ph: 510-623-7526 www.ayantra.com

Note: this product incorporates unique Patented and Patent-Pending technologies developed by Ayantra



# FleetReefer Refrigerated Trailer Management Solution

## **Key Features**

MESSAGING: Each FleetReefer monitoring unit sends "Activity-Based Updates" plus regularly-scheduled updates. Each message includes the reefer's Location, Temperature, Speed, Compressor Hours, and Battery Level.

#### Activity-Based Updates:

The remote monitoring unit sends a message each time that it detects a Temperature Violation, a Speed Violation, or a battery problem; or if the reefer Approaches/Departs a key site. The monitoring unit also features one user-configurable input to report Faults and/or other types of events, if desired.

## Regularly-Scheduled Updates:

The monitoring unit sends update messages at regular intervals whenever the reefer is ON, or when the reefer is moving. Each update includes the reefer's Location, Temperature, Speed, and Battery Level. The regularly-scheduled updates can occur at 60-minute, 30-minute, or 15-minute intervals (specified on order).

#### On-Demand Updates:

Users can access the website to command any unit to send an immediate update at any time.

- **TEMPERATURE MONITORING:** The FleetReefer temperature sensor continually monitors the temperature within the reefer compartment. Users can access the website to set High and Low temperature limits for each reefer. Temperature Violations are reported immediately upon detection, and can trigger real-time Alert Notifications sent as text messages and/or email messages. The website also produces a variety of management reports, including Temperature Graphs, "electronic strip-charts," and other performance summaries.
- ALERT NOTIFICATIONS: Performance Violations are reported immediately to the Ayantra server. Examples include Temperature Violations, Speed Violations, GeoFence Violations, Faults, and Low Battery. Each violation can trigger an immediate Alert Notification sent as a text message and/or as an email.
- COMPRESSOR ON/OFF REPORTS: The monitoring unit automatically reports each time the reefer's Compressor is turned ON or OFF, and the website displays the reefer's accumulated Compressor Run-Hours.
- SERVICE DUE REMINDERS: The FleetReefer solution can issue "Service Due" reminders based upon the reefer's accumulated Compressor Run-Hours, or based upon calendar-day intervals.
- TRACK REPORTS: Authorized users can create Track Reports to display the reefer's path on a map.

40 mA (typ) @ 12V

HISTORY LOG: Each reefer's location and status information is retained in the database for twelve months, enabling authorized users to examine its historical performance. This information can be used to confirm the reefer's compliance with regulatory requirements; or for Customer Billing, Fleet Management, or other applications.

## **Hardware Specifications:**

 ❖ Physical:
 5.00" x 3.50" x 1.55"

 ❖ Power:
 8 - 32 volts DC

❖ Power Draw: Active: 65 mA (typ) @ 12V

Monitoring unit - Operating:  $-32^{\circ}\text{C} \rightarrow +60^{\circ}\text{C}$ Monitoring unit - Storage:  $-45^{\circ}\text{C} \rightarrow +85^{\circ}\text{C}$ ♦ Humidity:  $0 - 95 \text{ RH} \oplus 40\text{C}$ 

❖ I/O Ports:

Input Ports: 2 Inputs





Image shows unit with cover removed

Ayantra, Inc. 47873 Fremont Blvd. Fremont, CA 94538 Ph: 510-623-7526 www.ayantra.com