THE EXCLUSIVE SOLUTION FOR BUS HVAC TELEMATICS

CONNECTED SUITE™
powered by THERMO KING

Turning data into practical intelligence.
Improve your operations.

Would you like the ability to communicate directly with your HVAC supplier without the cost of using a 3rd Party provider? Do you seek real-time alerts to mitigate unscheduled road calls and improve operational efficiencies? Are you tired of manual tracking processes that take more time than they are worth? Would you like to identify real energy saving opportunities that will affect your bottom line?

**Then ConnectedSuite™ is for you!**

ConnectedSuite is a complete bundle of Thermo King technology **designed to deliver information** that matters to you and **connect you to all your assets at any time.**

### Asset Tracking

![Asset Tracking Image](image1)

The system allows fleet managers to see in an easy-to-use graphical layout: the GPS locations, routes, and system temperature for all their assets.

### Connect

to the condition of your assets at any time.

![Connect Image](image2)

### Collect

data on your assets in real time and track fluctuations in historical behavior.

![Collect Image](image3)

### Correct

inefficiencies by improving critical uptime, asset utilization and the cost of operation.

![Correct Image](image4)
Real-time insights and notifications.

Roadcall Prevention
- Determine immediately if the HVAC is functioning correctly.
- Check active alarms.
- Look at Deta “T”, duct temperature, space temperature, fan speed, and compressor operation.
- Avoid route disruption. In many cases a roadcall is not needed.

An operator can determine quickly that this system is functioning properly.

Notifications with Diagnostics
- Alarm codes are accompanied by diagnostic information. No need to look up manually. Get more done in the same amount of time.
- Maintenance and repair can be scheduled off cycle, resulting in less downtime and better asset utilization.
- Access through convenient TK Notify mobile app.

TK Notify is a free app available to download from:

 identifying Performance Issues
- Control critical performance metrics for your entire fleet at a glance.
- **Proactively** investigate units operating outside of the normal parameters before they are forced out of service.
- Get immediate insights on driver behavior.
- Compare fuel and energy use performance and identify opportunities improvement.

GREEN = Within Range  BLUE = Out of Range  RED = Existing Alarm Condition
Improved fleet maintenance and HVAC efficiency.

Nothing clogs up a route system more than having a vehicle maintenance breakdown, especially if it is something that could have been prevented.

ConnectedSuite gives you the ability to monitor and maintain your bus logistical data so that you can proactively address the real-time status of all your vehicles.

- Resolve minor issues before they become catastrophic.
- React quickly to reported issues in real time rather than after the fact.
- Reduce unscheduled maintenance time.
- Let the HVAC supplier provide the data analysis with periodic health checks tailored for your fleet.
- No need to take buses out of service for software updates.
- Continuously upgrade your fleet with the latest software updates that can improve efficiency and reduce operating costs as your fleet ages.

**Added Values That Deliver Savings and Operational Efficiencies**

- HVAC remote setpoint/mode capacity
- HVAC critical alarm real-time remote monitoring
- HVAC remote firmware management
- HVAC performance visualization
- Increase asset utilization
- Reduce maintenance & operating costs
- Communication with bus energy management system

Optimizing HVAC energy usage and performance
Complete connectivity.

ConnectedSuite is a completely independent and stand-alone telematics solution that helps you monitor and control your most critical assets.
Analytics to improve operations.

With the ConnectedSuite package, the following types of analytical reporting and much more is available to you with scheduled, periodic HealthChecks tailored for our fleet.

Reheat Analysis

Reheat is sometimes necessary but it is also often over used. It costs additional fuel to use reheat, so why use it when you don’t have to. This system will automatically identify the conditions when reheat is not needed resulting in fuel and energy savings.

Setpoint Variability

Did you know that by controlling your set point across your fleet could save you thousands in fuel costs? Lowering the set point does not make the HVAC cool faster, but it can cause your compressor run time to increase and create coil freezing issues that could lead to a road call.
Unleash the hidden potential of your fleet, while discovering new opportunities to reduce operating costs.

The many features available in ConnectedSuite allow you to use it as a fleet management tool. Not only do you get real time visualization and alerts, you can look at the history of a single unit, a group of units or even the entire fleet. Get answers and take action on some of the questions that plague managers.

- Why do some buses get better fuel economy than others?
- Why do some drivers get better fuel economy than others, no matter which bus they drive?
- Why are the operating costs lower at some garages or higher at others?
- Which buses and garages have a higher incidence of road calls and other out of service issues and why?
- Why is a certain component failing or having a reported issue more at certain garages?
- Why is refrigerant use higher?
- If I could get HVAC energy consumption by route, could I plan my battery bus routes better?

And that is just the beginning. It has been proven that “When Performance is Measured, Performance Improves”.

Real World Results

Informed Discovery
A customer’s unit was running with a lower DeltaT than the rest of the fleet. During regular maintenance the customer, armed with information, found a faulty component which was replaced under warranty at no charge. Without the insight from the connected HVAC system, the bus would still be consuming more fuel and potentially result in a road call and out-of-warranty repair.

Historic Reference
The bus operator reported a problem with cooling at the end of his shift. The next morning, there was no issue found. The customer used the system to look at the unit performance history from the last week. Not only could they validate the existence of a real issue, but also easily determine the cause of the problem and fix it instead of simply sending it back on the road. In this case there was a valve that only showed symptoms when hot.

Proactive Maintenance
A customer was alerted to cooling issues on a warm day, before the operator or passengers became uncomfortable. The bus was scheduled for maintenance and a simple 15 minute fix on a valve solenoid was discovered and corrected, resulting in the prevention of a road call.

Learn more about ConnectedSuite from your Total Solutions Provider
Visit thermoking.com/bus to check out the latest updates and expansions.
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