

# Dawar Technologies and IdleAire Create In-cab Service Solution that Delivers



## case study

*When one long-haul truck driver wanted the services inherent in an RV to be available in his truck cab, necessity became the inspiration for an entire company, and the basis of a product now poised to revolutionize the trucking industry. ▲*

That company is IdleAire Technologies Corporation ([www.idleaire.com](http://www.idleaire.com)), founded in 2000 and headquartered in Knoxville, TN.

IdleAire's innovative in-cab service solution lets drivers who traditionally idled their engines to heat, cool and power accessories in their truck cabs, now turn off the engine while they rest, or wait to load or unload cargo. Using a unique service delivery module, truck drivers can control temperature, fan speed, and other essential onboard services from the truck cab via an interactive 'touch' screen that connects to an HVAC unit installed above each truck parking space.

Despite its extensive capabilities, the key to IdleAire's solution is ensuring that truck drivers find the service module inviting and easy to use. To create an attractive, highly interactive user interface, IdleAire needed a supplier that could provide the necessary components and meet their stringent design requirements.

After initially working with another company, IdleAire turned to Dawar Technologies—one company with the resources to address the unique needs of IdleAire's service solution.

### TRANSFORMING AN INDUSTRY'S IMAGE

In today's trucking industry, 1.3 million trucks used to transport goods in the U.S. are 'long-haul' trucks with sleeper cabs, powered by diesel engines. Trucks and drivers congregate at terminals waiting to load or unload, or at travel centers where they complete their mandatory eight hours of rest before traveling again. During this time, the drivers stay in their trucks because motels are often too expensive, or the trucks and loads are too valuable to leave unattended.

Drivers idle the truck engines to heat and cool the cabs, and run appliances, televisions, computers, etc., which make their lives more comfortable but which can also drain the vehicle's batteries. More important, the extended idling consumes fuel, creates air and noise pollution, and shortens engine life, ultimately producing negative impacts on the truck, driver, the travel center or terminal, as well as neighborhoods and surrounding communities.



exceptional  
customer service

expert workmanship

proven processes

greater success

By eliminating the need to idle engines, IdleAire believed it could create a breakthrough solution that not only minimized the negative effects associated with long-haul trucking, but that also provided significant benefits to drivers, fleet owners, travel center and terminal operators, and the general public. Additionally, by lowering fuel costs, IdleAire's solution could ultimately help reduce the nation's growing dependence on foreign oil.

#### THE RIGHT BUSINESS PARTNER

Jim Hannah, Vice President of Product Development for IdleAire, put the project team together and supervised the two-year development of the service delivery module for the in-cab service solution. Hannah found Dawar's capabilities and project commitment an ideal fit for their design.

"The service module had to provide all of the essential functionality in a relatively small footprint," Hannah said. "When we needed an alternative solution for our prototype production, Dawar won hands-down over our former supplier."

The development process was very fluid, with lots of changes that required extremely fast turnarounds. But Dawar's engineering and manufacturing team delivered exceptional response.

"They turned around complex CAD drawings in just a few days," Hannah said, "providing revised designs that consistently met our product requirements."

#### A BREAKTHROUGH SOLUTION

IdleAire's solution features the service delivery module tethered by a round, flexible duct to an HVAC unit installed above each truck parking space in a travel center or loading terminal. The console mounts conveniently in the passenger window of the truck cab or in an OEM location built into the vehicle itself.

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service delivery  
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From the console, drivers access temperature controls, air supply/return, credit card reader, laptop-type computer with 10.4-inch color display, satellite television, movies, and 110-volt outlets inside and outside the unit. Drivers connecting to the service module use their fleet fuel card, credit card or pre-paid IdleAire card to pay the hourly fee for the services they select. IdleAire shares income with the travel center, which has no expense associated with the installation.

The fees amount to significantly less than the cost of the diesel fuel used to idle a heavy-duty truck for one hour.

“The IdleAire system can be installed in travel centers, loading facilities, truck terminals, border crossings, port facilities, and many other locations to extend its benefits virtually anywhere,” said Hannah. “And with Dawar’s technology, we have the built-in assurance that the driver interface will consistently provide reliable, easy-to-use access to services.”

#### ENSURING DRIVER ACCEPTANCE

Why is driver acceptance so critical to the success of the in-cab solution? IdleAire found that few truck drivers are familiar with computer technology. “Our research shows that only 10% of today’s truck drivers are familiar and comfortable with computer technology,” said Hannah. “If drivers are unwilling or hesitant to use the service delivery module because it

appears too ‘high-tech,’ it won’t matter how well it operates or what services it offers. They won’t use it. To gain the full benefit of our solution, drivers have to find it easy to access and easy to use—regardless of their individual comfort level with technology. That’s why Dawar’s products are so effective.”

To achieve full-scale driver acceptance of IdleAire’s service delivery solution, Dawar’s membrane switch assemblies and graphic overlays give IdleAire’s unique service delivery module the essential ‘eye’ appeal that increases functionality and makes a positive first impression with drivers.

“By bundling the required technical capabilities into a visually appealing package,” Hannah said, “Dawar has helped us create a system interface that all drivers can easily relate to.”

“Dawar is proud to supply the user interface components for this truly revolutionary product,” said Gary Holcomb, president and chief executive officer at Dawar. “We’re extremely pleased to be working with IdleAire and to provide them with the tools that enhance the overall success of their service delivery solution.”

Dawar’s commitment to IdleAire’s success extends beyond the service delivery module solution, though. “Dawar has been instrumental in helping our





Membrane Switches



Graphic Overlays



Smart Cards



Silicon Rubber Keypads



Encapsulated Labels



Roll Labels

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company move from our initial R&D business to full-scale production of the service solution,” Hannah said. “They’ve provided critical input and recommendations for how we can reduce costs while completing the effective ramp-up of our facilities.”

#### LONG-TERM BENEFITS FOR THE LONG-HAUL INDUSTRY

By allowing drivers to shut down their engines, the IdleAire solution decreases the normal costs of fuel and maintenance for truck owners by as much as 40% and provides travel center operators with a new source of revenue. Additionally, it reduces noise levels and helps improve air quality.

Supported by growing acceptance from the trucking industry and regulator and legislative communities, IdleAire has begun large-scale rollout of its service delivery solution. Systems have been installed in Atlanta, Knoxville, South Bronx, NY, on the New York Thruway, and plans are underway for deployments at 16 additional sites in Tennessee, Arkansas, Alabama, Florida, Texas and California.

#### PIONEERING SUCCESS ON THE ROAD

IdleAire’s solution represents a pioneering approach to addressing the key challenges facing the industry—fuel costs, maintenance costs, job demands and driver turnover, profit margins, pollution—issues that must be resolved to ensure the industry’s continued success.

“Our solution can help drivers enhance their work environment for greater job satisfaction and safer performance,” Hannah said. “Fleet owners can reduce truck maintenance, fuel and other operating costs, and the entire community-at-large benefits from the reduced air and noise pollution that can be realized. With Dawar’s interface components ensuring that drivers are ‘onboard’, we’ve accomplished a key objective in IdleAire’s mission to transform the long-haul trucking industry.”

#### FOR MORE INFORMATION

To learn more about Dawar and its products, contact Dawar Technologies at 800-366-1904 or visit [www.dawar.com](http://www.dawar.com).