



White Paper

# ELD Reliability



Make the  
smart choice  
2022

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# Reliability

**It just may be the most sought-after term in all of trucking. Every fleet strives to be known as a reliable carrier for their customer base. It can take years of hard work – and thousands of safe, on-time deliveries – to gain that reputation, but even one bad incident can do lasting damage to a fleet’s standing.**

That pressure has only increased in recent years, fueled by technological advancements, and changing shipping patterns emerging out of the COVID-19 pandemic. As a result, fleets are investing more time and money to make sure the vehicles they purchase are the highest quality and properly aligned with the freight routes they are traveling. It’s also why fleets are taking unprecedented steps to ensure they recruit and retain the most safety-conscious professional drivers. That includes large signing bonuses, more guaranteed home time and a growing number of financial incentives and other competitive perks.

Despite these efforts, more and more companies are discovering a single decision made years earlier is now threatening to undercut their reputation with customers and increasing frustration among the drivers they are so desperate to keep happy. That critical decision was the electronic logging device (ELD) they chose. For some fleets, the ELD choice was made strictly in response to the Federal Motor Carrier Safety Administration’s 2017 mandate requiring use of the devices to monitor the hours of service of commercial drivers in the United States. For those fleets, the focus was on price rather than overall functionality.

Fleets that did make a substantial investment in an ELD system believing they could ensure compliance and increase productivity are now finding they selected an unreliable technology one unable to keep up with today’s rapid business pace.

That is adding costs, upsetting customers and frustrating drivers. Thankfully, it’s not too late for these carriers to make a change to set them up for greater success for years to come.



# System Outages Following the ELD Mandate

According to FMCSA's mandate, electronic logging devices are required to connect to a vehicle's electronic control module (ECM), and fleets must be able to track date, time, location information, engine hours, vehicle miles, user identification data, vehicle identification data and motor carrier identification data. These devices also must be able to detect malfunctions and inconsistencies related to power, data synchronization, timing and other issues.



In past years, there have been several high-profile outages among widely used ELDs. One recent incident was attributed to a GPS rollover event, which caused a complete contact loss with the affected units. This prevented customers from accessing accurate time and location data until a firmware update was developed.



Another manufacturer suffered an outage due to a similar system syncing problem. And in another case, some ELDs suffered a completed connectivity disruption due to a system update. It forced certain systems to be taken offline while computer forensic specialists investigated the cause.



If a device malfunctions, fleets have an eight-day window to get them back up and running, or they must seek an extension from the FMCSA. Of course, the impact on business operations and to the customer base is instantaneous.

# Impact on Customers and Drivers



Any outage, even one that only strikes a small portion of a fleet, means shippers may not have the complete tracking visibility they were promised by that carrier when reaching an initial service agreement. It could require the impacted vehicles to be routed to a service center or home terminal to receive a software patch, delaying critical shipments and creating ripple effects further down the supply chain.



Driver disappointment



Waste of time



Loss of business

Beyond the damage to a fleet's reputation, this uncertainty could expose a fleet to legal concerns should cargo be damaged during the delay, or business contracts lost due to the inability to provide timely deliveries related to the ELD outage.

Quite possibly the only people more frustrated by an ELD outage or malfunction than the customer base are the truck drivers working for that fleet.

These truckers have spent significant time and effort learning how to use the devices so critical to their livelihood. Beyond just tracking HOS, in many cases ELDs act as the "central nervous system" of a tractor-trailer, providing drivers operational data and critical communications. Many ELDs are positioned to further aid a driver do his or her job, from reducing paperwork to speeding pre- and post-trip inspections. All of these advantages are lost when there is a malfunction.

Even if there is only a brief outage, it is likely to cause extended waiting periods for the system to load properly or to be rebooted. This leads truckers to contact dispatchers for guidance on how to proceed, especially in cases when they are not able to accurately calculate how much more time they are allowed to drive during their current shift. As a result, they need to revert back to paper logs, creating an added layer of frustration and complexity.



# ISAAC

# The Reliable Choice

**It's clear that electronic logging devices have the potential to improve customer service, boost driver satisfaction and increase overall productivity. But that's only if a fleet makes the right choice for today – while also thinking ahead to tomorrow.**

And that's where ISAAC Instruments' ELD and driver-centric solution built for trucking come in. ISAAC's solution optimizes end-to-end operations and is easy for any driver to use. The open platform allows for the seamless integration with existing transportation management systems to automate and simplify workflows.

The user-friendly interface guides drivers step by step to eliminate errors, translating into less paperwork, and more time for driving. ISAAC's devices also have long used Wi-Fi communication because of its high reliability. It is also equipped with a recorder that continues to gather data in the unlikely case of a tablet malfunction.



## The ISAAC solution is: Reliable

Unlike many competitors, ISAAC's open and enterprise-grade platform is built on modern architecture that has proven reliable year after year. Our mission-critical design philosophy makes our fallback strategy transparent to every client, further ensuring reliable connectivity and uptime.



## Built for trucking

A key piece of ISAAC InControl is the rugged tablet designed to be taken outside the truck cab, regardless of the weather or location. This allows drivers to easily take pictures, scan documents and get signatures without fear of breaking the device.



## Driver-centric

ISAAC provides each driver with a personal account for accessing messages and other information, rather than a single login for each truck. This means the right driver receives the right message, and alleviates privacy concerns in cases when drivers are traveling in teams or move from vehicle to vehicle.



## One system, full support

The rugged tablet has another advantage over other options that encourage drivers to use their own personal devices. While drivers might prefer to use a phone or tablet they are already familiar with, if they break it, forget it at home and even forget the charger, it could make electronically tracking hours impossible. Likewise, if there is a technical problem with the personal device on the highway, it is highly unlikely a technical support expert will be able to correct it in real time.

Another IT problem for fleets that provide in-cab devices to drivers is the large number of different hardware and operating systems configurations they need to manage. One large national carrier estimated it has nearly 50 different individual hardware/software configurations through one single vendor, which can be particularly problematic when a system update is required.

However, with ISAAC there is only one hardware iteration, making it a far simpler process to push out over-the-air-updates four times a year. This virtually eliminates any downtime for fleets while making sure every device is working with the latest software. Fleets can install third-party software and apps to further ease a driver's job and speed back-office processes.

All of these benefits, combined with round-the-clock client support, make ISAAC the right choice for fleets seeking the most driver friendly ELD system while also boosting the company's bottom line.

And at ISAAC, it's not only about supporting the demands of today's fleets. Behind the scenes, we are busy at work anticipating the business needs of tomorrow, ensuring fleets remain compliant, safe and productive for years to come.





Together,  
we **simplify**  
trucking

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Talk to our experts to harness  
the full potential of your team

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