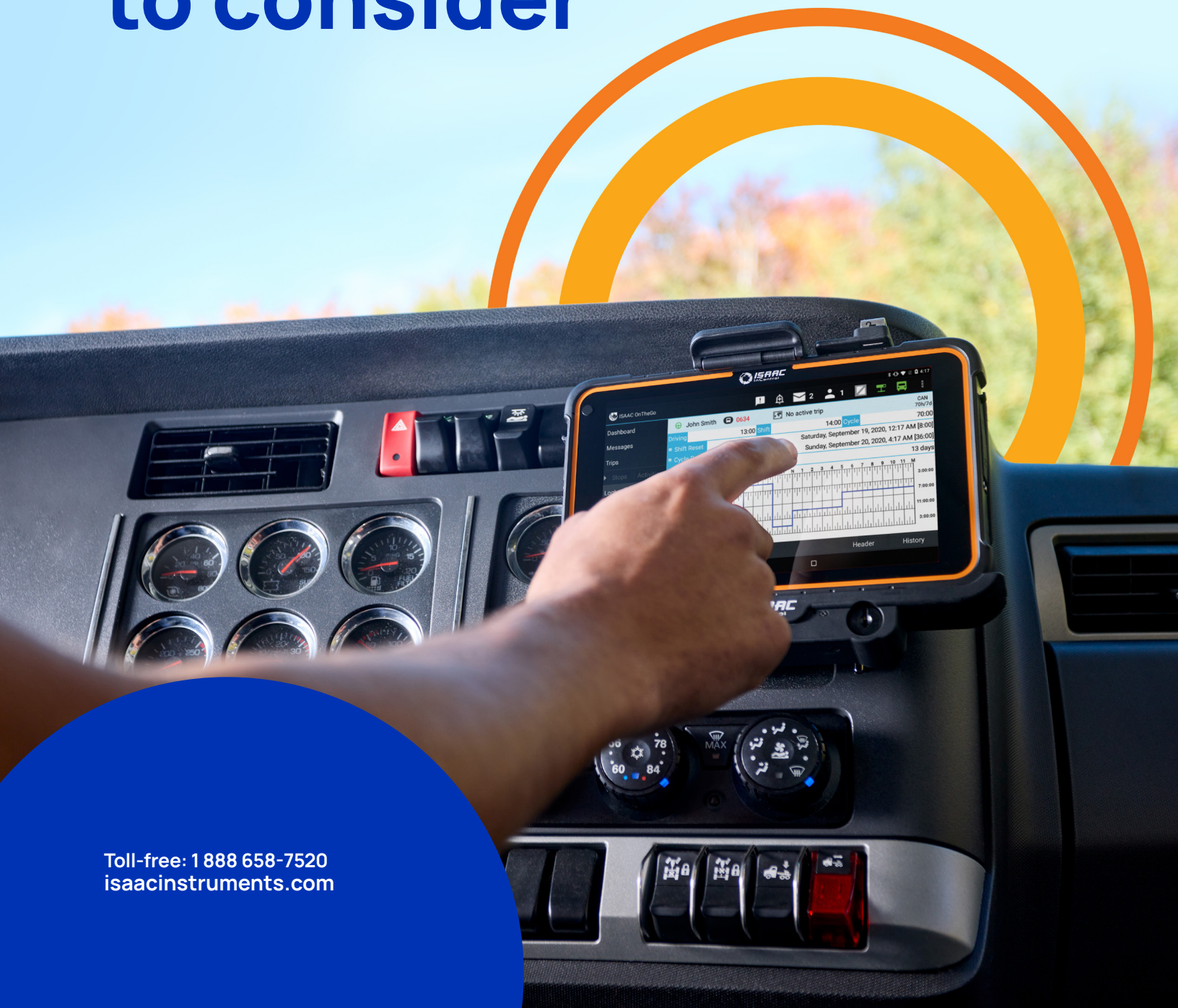




White Paper - Choosing your ELD display device

A checklist of the elements to consider



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Introduction

While shopping for an ELD solution, you are probably encountering various display device options.

Some vendors provide a turnkey solution that includes a tablet while others give you software that you can install on the device of your choice (smartphones, tablets, etc.). Sifting through the industry's technological offering can be a daunting task.

You could approach the decision-making process by envisioning how your ELD solution will fit the running of your operations. To assess your needs, you should determine how mission-critical your fleet management solution is to your business.

ELD legislation

Since December 2017, Electronic Logging Devices (ELDs) are mandatory for truck drivers required to keep records of duty service and operating in the United States. In Canada, the regulation was published in June 2019 in the Gazette II making the ELD mandatory as of January 2023.

It is essential that you get an overall view of the available options to avoid being caught off-guard.

ELD in brief

ELDs are a technology that automatically records an operator's driving time to ensure compliance with the Hours of Services (HOS) rules. "An ELD monitors a vehicle's engine to capture data on the vehicle status and output information such as miles driven and duration of engine operation (engine hours).*" The ELD consists of two major components: a recorder plugged into the truck's engine to register the required information and a display device that allows an operator to enter his duty status as well as edit or finalize his driving logs.

* "Electronic Logging Devices and Hours of Service Supporting Documents -Frequently Asked Questions 2016", FMCSA



The case for one display device per truck



Some solutions equip each driver with a display device as opposed to equipping each truck with a device. Having devices tied to trucks, however, presents several advantages.

Better risk management

Managing risk is a strong argument in favour of tying display devices to trucks. When you assign a device to a driver, he will need to bring it home when his shift ends. If he forgets his phone or tablet at home, the fleet manager will need to supply him with spare equipment. This entails extra set-up work such as configuring a user account on the spare equipment and ensuring that it is paired with the truck's telemetry recorder (page 3 "ELD in brief"). This extra work can, in turn, lead to potential delivery delays of client merchandise.

Moreover, even when the driver does remember to bring his regular device, he is still responsible for pairing his phone or tablet whenever he changes trucks and must be careful to select the right vehicle in doing so. With a typical driver's workload, this type of oversight could easily happen and would consequently increase the likelihood of invalid roadside inspection reports, and failure to supply inspectors with required documents.

When you opt for a tablet supplied by the ELD provider, you can tie display devices to trucks. The tablet remains in the truck, and you consequently eliminate the risk of devices being forgotten or paired with the wrong vehicle. If you're worried about not being able to reach your driver when he's away from the truck, there is no cause for concern; most solutions allow your driver to access his account remotely. Also, when he is away from the vehicle (home for the weekend or at a truck stop waiting for his next assignment), you can notify him of any change to his upcoming trip via email or SMS.

Lower cost of ownership

If your fleet operates with more drivers than trucks, opting for a dedicated tablet per vehicle can decrease your hardware investment. With the right software, drivers will not be inconvenienced from sharing a tablet.

To ensure the confidentiality of your drivers' information (messages, logbooks, etc.), ask your vendor whether drivers are able to log into their individual account when using the different tablets across the various trucks. Loss-proof storage of meaningful footage means no important footage gets lost thanks to permanent, unremovable camera memory and server storage following downloads.



The case for a device supplied by the ELD provider

A supplier that offers a dedicated tablet has conducted all the research on your behalf to provide the most transport-adapted display device.

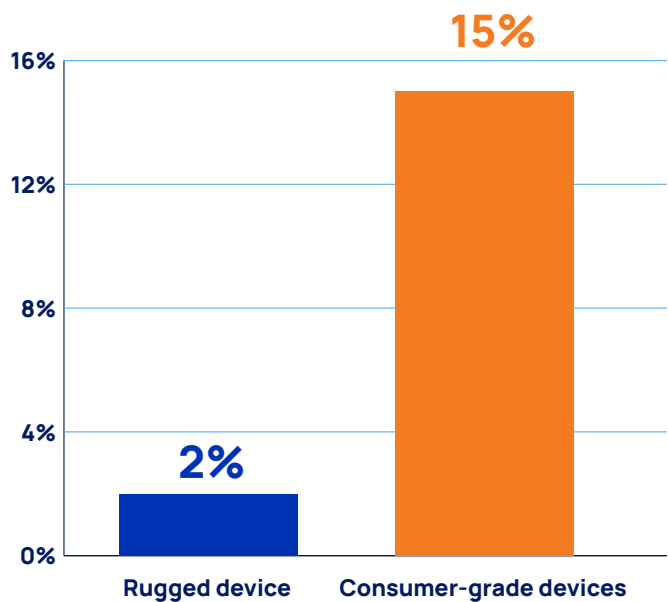
A tablet designed for your needs

If you choose a solution that assigns display devices to trucks, these will remain in the vehicle, which poses a problem when using consumer-grade tablets which are not built for extreme temperatures. The selected device should be rugged enough to sustain harsh operating conditions inherent to the transportation industry. It needs to withstand high temperature variations and in-cab vibration. It should also offer long battery life.

Besides, the device must be impact-resistant. Indeed, in his daily work, the driver will use the device outside the truck to gather signatures, perform pre-trip inspections, etc. It is likely that he will drop it while completing these tasks. If the device breaks, not only does this incur replacement costs, but it hinders the driver's ability to complete merchandise deliveries until you provide him with a functional device.

When you opt for a rugged tablet, you minimize the risks of damages to the device and contain your total cost of ownership.

Percentage of damaged or faulty parts



On average, the percentage of damaged or faulty parts on rugged equipment amounts to 2% vs. 15% for consumer-grade products.





Rugged devices are typically replaced every five years, while consumer-grade devices are changed every two years.

The selected tablet should have a camera to take pictures of defects and scan bar codes or documents.

Equally important, the tablet's camera should have a flash so the driver can scan documents in the dark.

Lastly, while researching product offerings, make sure that your model can be fixed inside the cab (as specified by the Federal Motor Carrier Safety Administration regulations). Finding a reliable and robust docking station can be a challenge with a consumer-grade tablet. The manufacturer of a transport-intended dedicated tablet, on the other hand, will include a compatible sturdy docking station in his product offering.

A driver-friendly interface

The software interface of a tablet supplied by the ELD provider has been designed to meet your drivers' needs. It usually includes all the necessary features for completing deliveries. Transport-related apps for ELDs, weighing, truck navigation GPS, messaging, etc., are integrated and tested to offer a seamless driver experience.

A tablet supplied by the ELD provider usually has a lockout feature to prevent unsafe and illegal interaction while the vehicle is moving. This increases safety while avoiding penalties.

Finally, indiscriminate downloading of various apps and software could infect your network and negatively impact your operations. Some transport dedicated models are locked (users cannot download apps without their IT department's consent) to block potential cybersecurity threats.



Using a cellphone while driving

Using a hand-held mobile phone while driving commercial motor vehicles can result in fines and driver disqualification¹.

Penalties can be up to
\$2,750
for drivers

Penalties can be up to
\$11,000
for employers



A single point of contact

If you choose a display device independently from your telematics solution supplier, you should keep in mind that you will be working with three separate companies: your phone/tablet provider (Apple, Samsung, Garmin...), your cellular company and your telematics' vendor. When an issue arises, it will be challenging to identify the responsible party and coordinate efforts between the various suppliers. With a turnkey solution, you can expect a single point of contact to troubleshoot technical issues.

Streamlined management of your ELD solution

A consumer-grade display device involves additional operational work and costs. If you decide to upgrade the tablet model or its operating system, you will need to make sure that all solution components can be integrated (tablet operating systems and ELD software).

It is worth noting that consumer-grade tablet and phone vendors release operating system updates several times per year. If your ELD provider supports multiple brands of display devices, you need to check whether he is testing the compatibility of his solution with every operating system update.

What's more, a turnkey solution provider offering a limited number of device models can afford to dedicate more resources to quality assurance and increase the frequency of released software versions while freeing you of the hassle of underlying OS considerations.

Apple releases ten iOS updates per year. Google updates its Pixel smartphone's operating system twelve times per year.

A turnkey solution offers a single point of contact to troubleshoot technical issues



Make the most out of the ELD implementation

ELD solutions are mission critical. Whenever the solution fails, this entails significant expenditures (IT, mechanics, vehicle, impaired operations, fines, etc.). A display device provided by your supplier may have higher entry costs; however, it offers undeniable long-term benefits. With a turnkey solution, you are opting for a product designed for the specific needs of the transport industry.

A rugged vendor tablet comes with quality assurance; it prevents you from having to deal with three different suppliers, and gives access to one support team for the duration of your contract. With this in mind, it is worth noting that a driver could still access his scheduled deliveries from any web browser, on any device.

It is crucial, however, to pick a reliable device to manage your core business and to study the available offers on the market carefully.

Checklist for choosing your display device:

- Individual driver login (information confidentiality)
- Resistance to high temperature variation
- Resistance to impact
- Resistance to strong vibration
- Camera with flash
- Ability to capture signatures
- Ability to scan bar codes
- Long battery life
- Robust and compatible docking station
- Availability of transport-related apps
- Lockout protection while driving
- Technical support
- Guarantee of compatibility between operating



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trucking

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