

# John Deere ForestSight™



Fuel Information  
24.8 %  
FUEL TANK LEVEL  
5.4 GPH  
AVERAGE FUEL RATE  
UNEXPECTED FUEL APPLICATION

Geofence Detail  
MACHINE  
2749162  
OK  
LAT 47.548329 / LON 26.473251

Disk Saw Utilization  
SPIN UP/DOWN  
LOW  
MEDIUM  
FULL

(507) RPM	9.5 HR
500-600 RPM	2.3 HR
(750-800) RPM	4.2 HR
(900-1000) RPM	25.7 HR

JDLINK™ MACHINE MONITORING  
MACHINE-HEALTH PROGNOSTICS  
REMOTE DIAGNOSTICS AND PROGRAMMING  
DEALER CONSULTATION

# JOHN DEERE FORESTSIGHT™

TECHNOLOGY SOLUTIONS



JOHN DEERE



JDLINK™ MACHINE MONITORING  
MAINTENANCE MANAGER  
MACHINE HEALTH  
REMOTE DIAGNOSTICS AND PROGRAMMING  
TIMBERNAVI™ JOBSITE MAPPING  
DEALER SUPPORT

# Bringing machines, technology, and your dealer together to make your job easier

John Deere ForestSight™ turns data into solutions to optimize machines, uptime, and your jobsite. Benefit from improved profitability with John Deere ForestSight.



# John Deere ForestSight delivers three primary benefits:

## 1. Machine optimization

Apply the machine and operations data provided through John Deere ForestSight to increase productivity and efficiency.

## 2. Uptime optimization

John Deere ForestSight integrates machine data, prognostics, and diagnostics tools with dealer support and parts availability to drive machine uptime. Integrated parts and service solution packages meet the unique needs of your specific applications.

## 3. Jobsite optimization

From nearly any location, you can see when and where your machines are working, how many cycles they are completing, and how much time operators spend out of the cab. This up-to-the-minute data lets you manage your production more efficiently.

Combined with the expertise of your dealer, John Deere ForestSight delivers answers, not just data.

## Optimize *machines*

Today more than ever before, you need to get the most logs to the landing for each gallon or liter of fuel you burn. John Deere ForestSight gives you visibility to the efficiency of your machines. Your John Deere dealer can even analyze the data for you and make recommendations for improvements.

### *For example:*

- Identify unused machines so they can be redeployed.
- Compare fuel-burn rate across multiple machines.
- See time spent idling, to reduce unnecessary fuel consumption.
- View engine load and fuel consumption, to match machine size to the job.
- Set up virtual fences and authorized hours of use, to improve security.
- Locate and get directions to your machines, to save significant time.

**LEARN MORE** about John Deere ForestSight machine optimization technologies:



JDLink™ machine monitoring system  
See pages 6–7.

# Optimize *uptime*

We know that when you're not up and running in the woods, you're not making money. John Deere ForestSight provides a number of ways to significantly boost uptime, plus save drastic amounts of time and costs associated with machine repairs. And it can serve as a helpful maintenance assistant. John Deere ForestSight and your dealer can also monitor engine emission components to ensure proper operation.

**For example:**

- **EXCLUSIVE** remote dealer diagnostics, machine-performance recordings, and even software updates reduce the time and costs associated with a technician trip to the jobsite.
- **EXCLUSIVE** machine health recommendations identify potential problems early so you can avoid more costly repairs down the road.
- Alerts sent to your computer, mobile device — even your dealer if you choose — inform you immediately of machine issues so you can address them quickly before they cause more costly repairs and downtime.
- Maintenance reminders based on predefined, customizable schedules go to your computer or mobile device.
- Documentation of completed maintenance helps at trade-in or resale time.



## Ask your dealer about John Deere Ultimate Uptime

Not all operations are the same, so that's why John Deere dealers offer Ultimate Uptime. Customizable fleet-advisory services are structured to boost machine availability at a cost per hour that works for you and your team. John Deere ForestSight maintenance-management tools empower you to collaborate with your dealer to maintain and monitor machine health.

### With every new John Deere forestry machine, you get:

- Five years of JDLink Ultimate monitoring
- Five years of machine health
- Remote-diagnostics and -programming capability
- World-class parts availability
- Pre-delivery set-up and followup inspections

You can work with your dealer to add many other services that meet your unique needs. For example, the John Deere Ultimate Uptime package that is best for you may include the above services plus a customized support agreement, filter kits, comprehensive fluid sampling, five years of full-machine warranty, operator training, and more.

Be sure to ask about your dealer's John Deere Ultimate Uptime solutions featuring John Deere ForestSight.

**LEARN MORE** about John Deere ForestSight **uptime optimization technologies:**

 <p><b>JDLink™ machine monitoring system</b> See pages 6–7.</p>	 <p><b>Maintenance Manager</b> See pages 8–9.</p>
 <p><b>Machine health</b> See page 10–11.</p>	 <p><b>Remote diagnostics and programming</b> See pages 12–13.</p>



## Optimize *jobsites*

With John Deere ForestSight, monitor multiple machines and watch over an operator's shoulder from many miles away to ensure the most efficient operation.

John Deere ForestSight provides information to manage costs and revenues. Variables like distance into the woods, the number of machines required, fuel use, and more are available to help you calculate costs and negotiate fair prices.

### *For example:*

- Analyze machine movements to identify operator-training opportunities.
- See fuel levels to forecast efficient refueling.
- Monitor skidder and feller buncher production.
- Document forwarding distances to negotiate rates with mills.
- Track inventory freshness to ensure product quality.
- Identify opportunities for workflow improvements.
- View startup and shutdown times for each machine.
- View stem-count production reports for tracked feller bunchers.
- Easily create detailed maps for maximum visibility to the land you're harvesting.
- Identify optimal skid distances for maximum fuel efficiency and lower daily operating costs.
- Set buffer zones around cut blocks and points of interest.
- See other machines on-screen for greater jobsite awareness.

**LEARN MORE** about John Deere ForestSight **jobsite optimization technologies:**



JDLink machine  
monitoring system  
See pages 6–7.



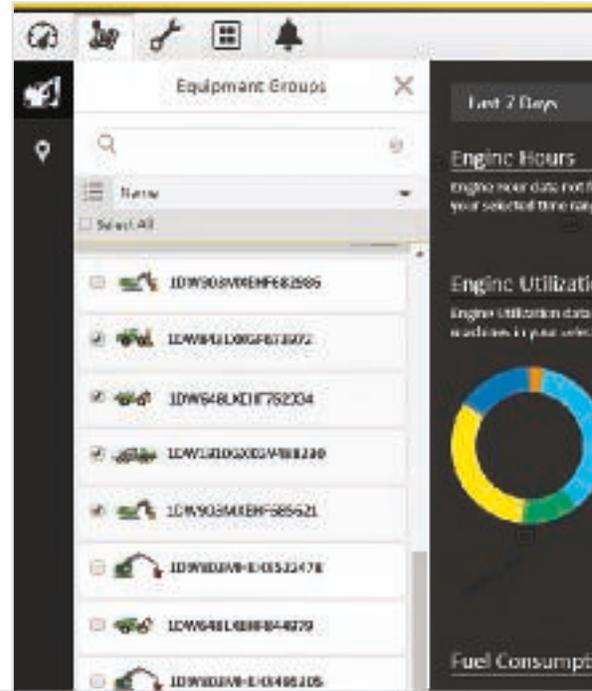
Timbernavi™  
jobsite mapping solution  
See pages 14–15.



# Manage multiple machines from one place

JDLink is your connection to the profitability-enhancing benefits of John Deere ForestSight™. From the fleet-management fundamentals of knowing the hours and location of all brands, to sending machine-health alerts and tracking machine production on Deere machines, JDLink can help you centrally, smartly manage your entire fleet and grow your business.

**A quick view of vital info:** The dashboard screen shows red alerts, machines with zero activity, time in idle, utilization, low fuel, and upcoming maintenance.



Cellular coverage

### Dual-mode option

If you work in extremely remote locations with spotty cell coverage, opt for the JDLink satellite module. JDLink will transmit via cellular coverage unless a connection can't be established — then JDLink switches to satellite mode to transmit information.



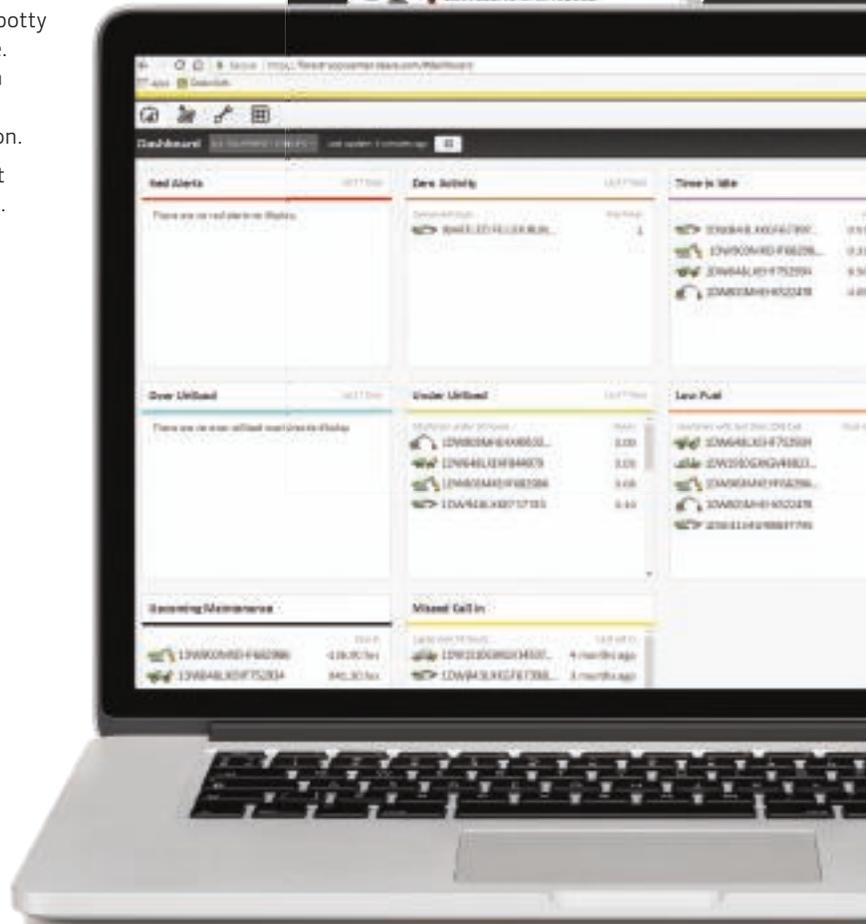
Satellite communication

A machine communicating via satellite will report hours, location, alerts, and many other data sets. Call-in frequency for a machine communicating in satellite mode is once per day. Red alerts and geofence violations are sent immediately at any time, just like when in cellular coverage.

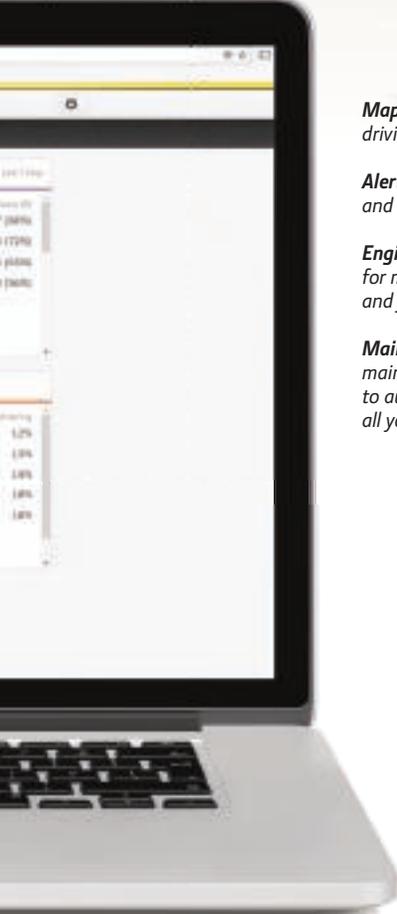
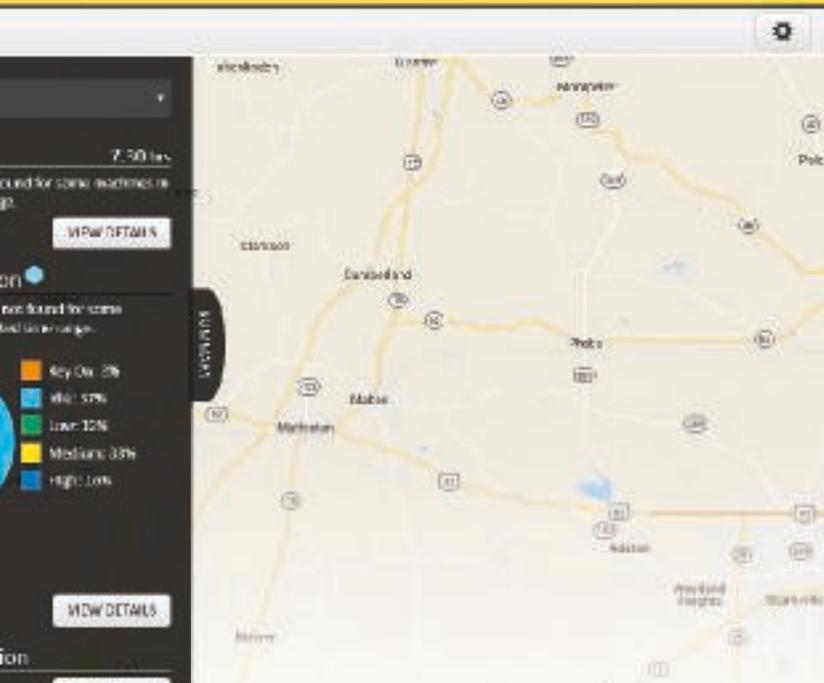


### Rugged and dependable hardware

The 4G LTE MTG is a rugged military-grade device designed to perform in harsh environments. It is standard equipment on most new John Deere forestry models and also available as a field kit. In addition to fast data transfer, you can tether to a smartphone or hotspot to transfer data using a Wi-Fi connection to the Internet in areas with poor cellular coverage. Wi-Fi setup is completed using the John Deere SolutionsPlus™ mobile app, available in the Google Play™ Store and iTunes® Store.



For optimal performance of JDLink Dashboard, John Deere recommends the latest versions of these browsers: Microsoft Internet Explorer®, Google Chrome™, Mozilla Firefox®, or Apple Safari®. Use a screen resolution of 1024x768 or greater.



**Maps:** Current location, location history, and driving directions.

**Alerts:** Diagnostic trouble codes, maintenance, and security.

**Engine hours:** Daily, weekly, and cumulative hours for maintenance planning, utilization analysis, and jobsite cost tracking.

**Maintenance:** Enroll in a factory-recommended maintenance plan or a custom maintenance plan to automatically track upcoming intervals due for all your enrolled machines in one place.

JDLINK	
Hardware	MTG/Satellite
Power required	Yes
Equipment brands	John Deere
Equipment type	John Deere forestry equipment working in remote and/or high-production applications — comes standard on most new John Deere forestry machines with five years of service
Benefit	An ultra-rugged solution for harsh conditions; provides satellite compatibility; CAN bus data access provides the most complete machine and operator information; data can be integrated into your business process
Features	<ul style="list-style-type: none"> <li>– Geofence</li> <li>– Curfew</li> <li>– Machine grouping</li> <li>– On-demand updates</li> <li>– Machine hours</li> <li>– Maintenance tracking</li> <li>– Equipment utilization and engine load levels</li> <li>– Fuel consumption</li> <li>– Operator-productivity indicators</li> <li>– Diagnostic trouble code alerts</li> <li>– Alerts sent to cell phone or email</li> <li>– Remote-diagnostics and -programming capability</li> <li>– Dual-mode satellite option</li> <li>– JDLink mobile app for Apple iOS or Android</li> <li>– Dealer data services/third-party access</li> </ul>



JDLink can be set up to send alerts via email or Short Message Service (SMS) text so you're always in the know. Alert escalation levels can be set to be sent to multiple contacts. There are also JDLink apps for Apple iOS, iPhone and iPad, and Android devices that provide machine location information, engine hours, the ability to view and acknowledge alerts, and JDLink data such as fuel consumption and level, average ground speed, and engine utilization.

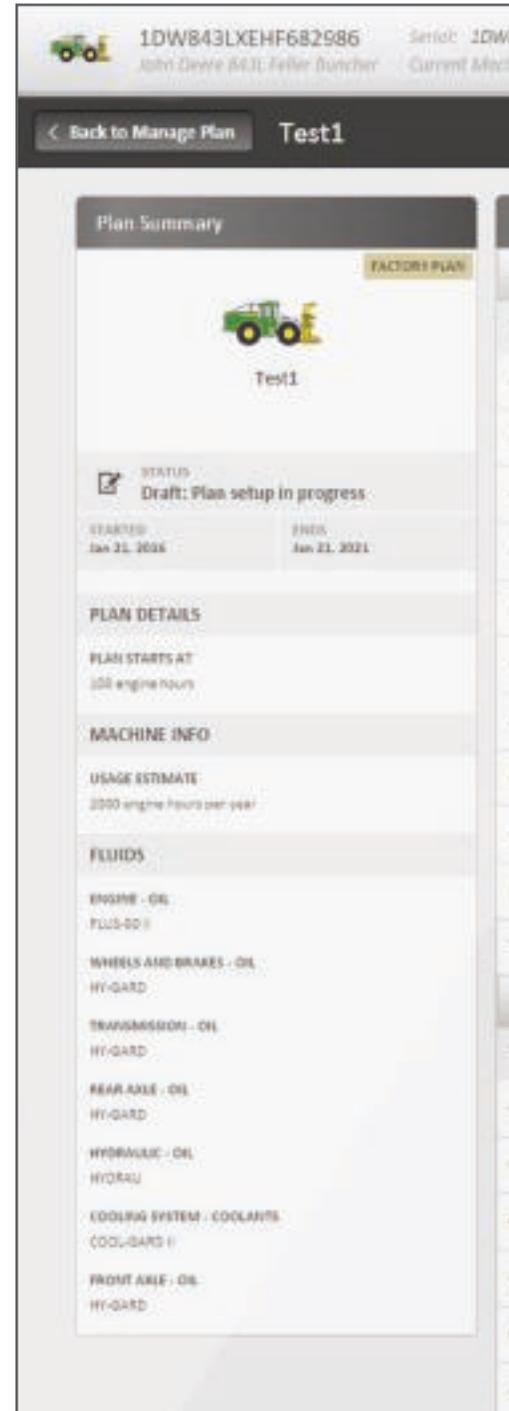
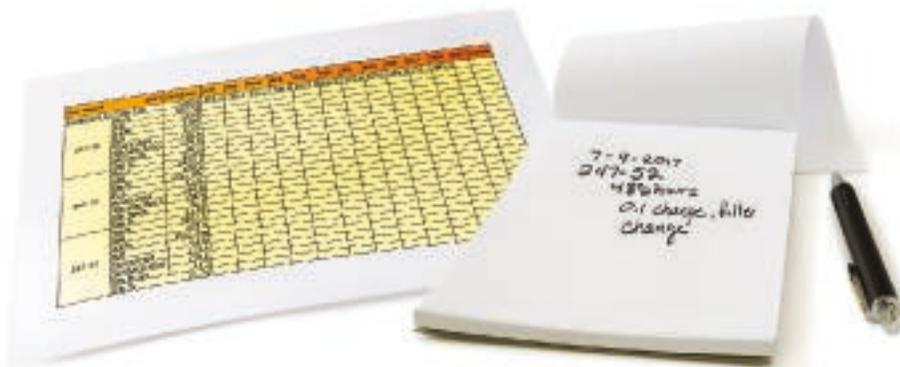


## An easier way to manage your maintenance

If you handle the maintenance on your equipment, you know that keeping track of intervals on multiple machines can be a headache. Now you can leave inefficient written notes, job-trailer charts, and spreadsheets behind. Maintenance Manager is a tool found in the JDLink™ Dashboard that enables you to easily configure a maintenance plan for every machine in your fleet. Tracking upcoming maintenance and logging completed service is quick and easy. You'll be alerted when maintenance is coming due. You can even track mixed-fleet maintenance by connecting non-Deere-powered assets to the application with a terminal from one of our mixed-fleet data-solution providers.

### The old way is a way of the past.

Maintenance Manager makes machine maintenance planning quick and easy, allowing you to leave old ways behind.



843LXEHF682985  
View Hours: 6

Maintenance Tasks

AT 250 ENGINE HOURS

TASK	CATEGORY
Change axle oil filter(s)	Rear axle
Change front axle housing oil	Front axle
Change rear axle housing oil	Rear axle
Check engine coolant level	Cooling system
Check engine oil level	Engine
Check hydraulic oil level	Hydraulic
Check pin seals	General
Check transmission oil level	Transmission
Clean dust unloader valve	Engine
Lubricate linkage and pivot points	Lubrication
Test engine oil	Engine

AT 500 ENGINE HOURS

TASK	CATEGORY
Change engine oil and filter	Engine
Change fuel filter(s)	Engine
Change hydraulic reservoir	Hydraulic
Change in-line fuel strainer	Engine
Check air intake system	Engine
Check axle oil level	Rear axle

## Maintenance Manager

**Let Maintenance Manager do most of the work**

Start with a factory-recommended plan pre-populated with tasks and service intervals. From there, you can accept the plan as is or easily:

- Edit task intervals.
- Delete tasks from the plan.
- Add custom tasks by hours or calendar date.

*The end result is a plan that is exactly the way you want it for each of your machine's maintenance programs.*

**Or do your own thing**

You can also build your own plan from scratch. Maintenance Manager lets you create your own task name, assign a category, and specify the interval type and frequency. The build-your-own option may be attractive if there are only a few key maintenance tasks you're concerned about tracking.

**Alerts**

Once your plan is set up, you'll receive alerts 50 hours before each task is due. Alerts will display in the JDLink maintenance pod as well as on the JDLink Dashboard.

**Monitor status**

You can view the status of all your intervals in the Maintenance pod within JDLink or on the Maintenance screen in the JDLink Dashboard.

**History and logging**

Simply open the machine details and go to the Maintenance Log to view maintenance history and log any completed maintenance tasks. You can also use the My Maintenance mobile app.





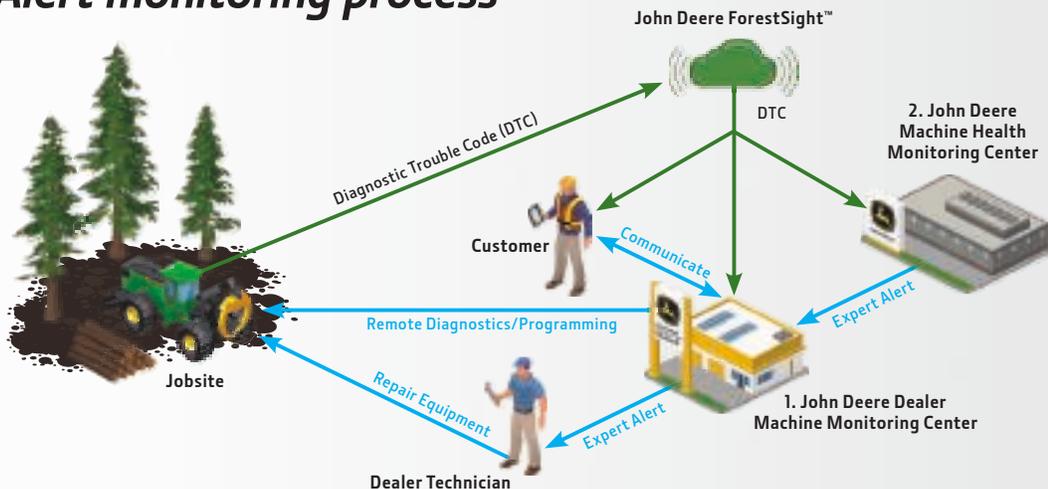
# The power to see through iron and steel

To maximize the uptime of your equipment, we deliver improved machine health through an advanced dual approach:

1. Specialists at your dealer's Machine Monitoring Center use the latest telematics and alert management tools to filter and analyze the JDLink™ data generated by your machines. They can also incorporate more traditional inputs, such as fluid analysis results. This enables them to quickly identify critical issues and react — sometimes before you even know there is a problem.
2. Our central Machine Health Monitoring Center located inside John Deere Dubuque Works archives data from thousands of connected machines. Specialists identify trends within the data, determine causes, and develop new and improved preventative maintenance and repair protocols called Expert Alerts. These alerts are deployed to dealer Machine Monitoring Centers to continuously improve the speed and accuracy of machine-health solutions.

*You can hand over all machine-monitoring responsibilities to your John Deere dealer. Or they can monitor your fleet in conjunction with your own maintenance team.*

## Alert monitoring process



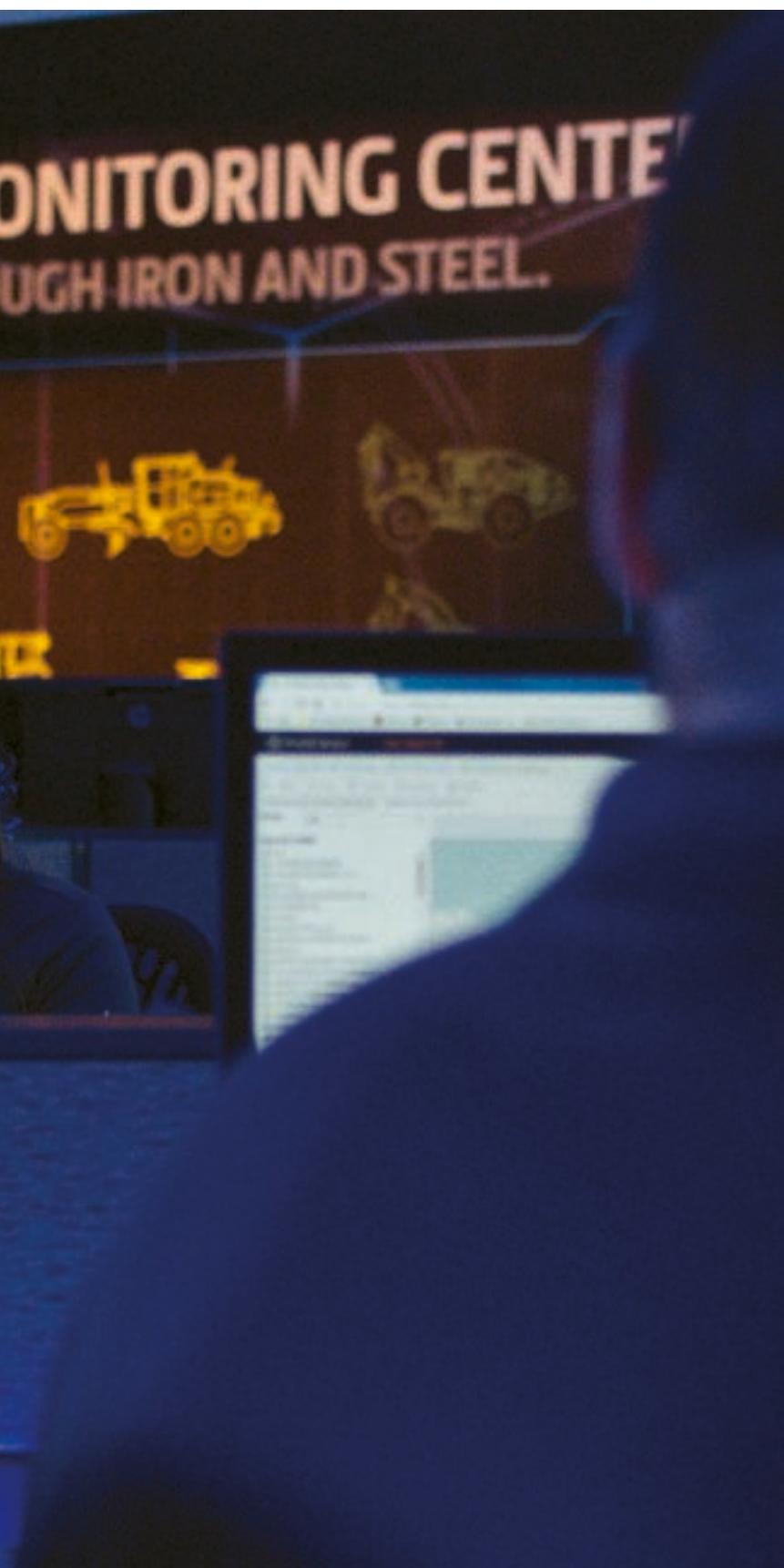
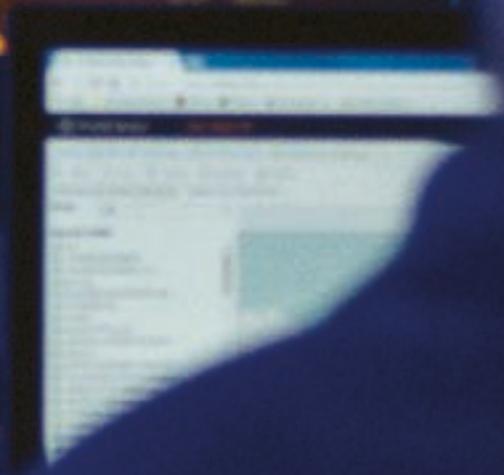
*A skidder sends a Diagnostic Trouble Code (DTC) to your JDLink Dashboard. When you utilize your dealer's machine monitoring services, the DTC also goes to your dealer's Machine Monitoring Center. The Machine Monitoring Specialists there can let you know if an issue is critical and requires action. They can even perform additional diagnostics and software updates without a trip to the jobsite if needed (see pages 12–13 for more details).*

*Response time is quick, and many times problems can be addressed before they cause downtime. When service technicians do visit the machine, they can often arrive with the parts to make the repair already in hand.*

*While your dealer focuses on addressing issues that may immediately impact you and your fleet, the Machine Health Monitoring Center continuously analyzes data from thousands of machines. The insights that only this big picture can provide help them develop and deploy solutions so your dealer can repair machines faster and even help you avoid unexpected downtime altogether.*

# MACHINE HEALTH MONITORING CENTER

THE POWER TO SEE THROUGH IRON AND STEEL.





# Faster, less costly repairs

What if your dealer could warn you of problems with your machine and initiate solutions without visiting the jobsite and charging you for a technician's travel time?

That's what you get with John Deere ForestSight's exclusive remote diagnostics and programming. Your Deere dealer can help you reduce downtime by accessing and resetting diagnostic trouble codes and recording performance readings remotely.

## Remote performance recordings

If your machine malfunctions at 1,000 rpm, for example, your Deere dealer can use remote diagnostics to record particular machine parameters at that rpm. The technician doesn't need to be onsite. And readings can be taken at full machine functionality, eliminating downtime.

If parts are needed to fix the problem assessed via remote diagnostics, the technician arrives onsite with the right parts without an initial trip to the field.

## Remote software updates

Using remote programming, your machine can also receive wireless software updates, forestalling a technician having to come to the jobsite with laptop in hand.

Your fleet-management and -maintenance team gain twice the bench strength when your dealer and your machines are connected through remote diagnostics and programming. The advantages to owning John Deere equipment just got a lot more compelling.

Three real-world examples of how John Deere ForestSight significantly optimizes uptime:

### EXAMPLE



## IMPROPER MACHINE OPERATION



**1 JOHN DEERE FORESTSIGHT** sends "engine derate" alert to dealer from jobsite.



**2** Dealer accesses the **JDLINK™** website, reviews machine-performance data, and confirms engine derate codes.



**3** Dealer contacts customer and makes **REMOTE DIAGNOSTICS** connection — very high engine coolant temp and derate are detected.



**4 DEALER** confirms with the customer — radiator debris screen is full due to high-debris jobsite.

**RESULTS:** Dealer suggests reducing fan reversal interval time to minimum duration available.

EXAMPLE

# 2

## REMOTE SOFTWARE UPGRADE



**1** Dealer receives a series of “engine derate” alerts from **JOHN DEERE FORESTSIGHT**.



**2** Dealer contacts the customer, who confirms the machine is sluggish.



**3** Dealer matches the derate symptoms and diagnostic code with a service bulletin that identifies the problem and requires a software update.



**4 DEALER** deploys an Electronic Control Unit (ECU) payload via **REMOTE PROGRAMMING** to update software and resolve the problem.

**RESULTS:** Dealer prevents downtime by correctly diagnosing and repairing the problem remotely.

EXAMPLE

# 3

## RIGHT PART FOR THE JOBSITE



**1** Customer contacts the dealer to report that the “hydraulic enable” does not work.



**2** Dealer technician establishes **REMOTE DIAGNOSTICS** connection and records data from the controller on-board the machine. After analyzing the data, the dealer determines the machine has a faulty door switch. **JDLINK** records driving directions after locating the machine.



**3 DEALER** technician arrives with a new door switch in hand for onsite repair.

**RESULTS:** Dealer sends a technician to the jobsite with the correct part for quick repair, avoiding an initial time-consuming diagnostic trip to the jobsite.





## More connected, more productive

Our innovative, easy-to-use jobsite mapping solution is designed to responsively optimize full-tree logging operations. Fully integrated with JDLink™ machine monitoring and wireless data transfer, TimberNavi reduces digital-mapping time by up to 60 percent and drives new levels of efficiency and productivity, both in the woods for operators and offsite for owners and fleet managers.



# TimberNavi connects you to your machine, your jobsite, and your office

**Easy to use.** TimberNavi's add-on toolbar and map designer features make creating maps quick and easy. That means more time for your other office responsibilities and less guesswork and downtime on the jobsite.

**Reduces costs.** The onboard measuring functionality helps operators easily identify optimal skid distances for maximum fuel efficiency and lower daily operating costs.

**Simplifies operations.** Full integration with John Deere L- and M-Series machines optimizes your fleet and guarantees complete service and support from your local John Deere dealer.

**Increases visibility.** The 10-in. high-resolution color touchscreen display is simple to learn and use. And it makes cut blocks and points of interest — such as streams, roads, and electrical power lines — visible to operators at a glance.

**Minimizes mistakes.** TimberNavi's alarm feature enables you to set buffer zones around cut blocks and points of interest. When those zones are crossed, operators will receive an instant on-screen notification.



## In the office:

*Gather site data, create a digital map, and transfer it wirelessly to the onboard TimberNavi monitor via JDLink — reducing the time to start a new jobsite by up to four hours.*



## In the machine:

*High-resolution in-cab display gives clear views of harvesting areas, points of interest, cut-block boundaries, and more. Remote Display Access speeds troubleshooting and support if needed.*



## TimberNavi maximizes efficiencies by providing:

- 1** Operator visibility beyond the view from the seat, including the location of other machines via the onboard TimberNavi monitor, for greater jobsite awareness.
- 2** Area-measuring tool, for optimized project preparation.
- 3** Boundary and point-of-interest awareness, for less operator idle time and more productivity.

## TimberNavi enables real-time, in-machine access to:

- Current machine position and tracking layer
- Terrain features
- Cut-block boundaries and alarms
- Landing and deck locations
- Plotted points of interest
- Tracking layers for other JDLink-enabled machines on the jobsite

**TimberNavi** is currently available for L- and M-Series Skidders, Wheeled Feller Bunchers, and Tracked Feller Bunchers. It can be installed at the factory and financed as part of your initial equipment purchase, or field-installed on existing L- and M-Series machines through your local dealer.

**Learn more.** See your Deere dealer or visit [JohnDeere.com/TimberNavi](http://JohnDeere.com/TimberNavi) to find out how TimberNavi and the exclusive suite of John Deere ForestSight technology solutions can be customized to maximize your operation.



# Your dealer works for you

John Deere ForestSight™ technologies help optimize your machines, your uptime, and your jobsites, ultimately leading to improved profits. But don't let "technology" scare you. Because your John Deere dealer employs a technology specialist who can help you enjoy the benefits of John Deere ForestSight with as much or as little involvement as you desire.

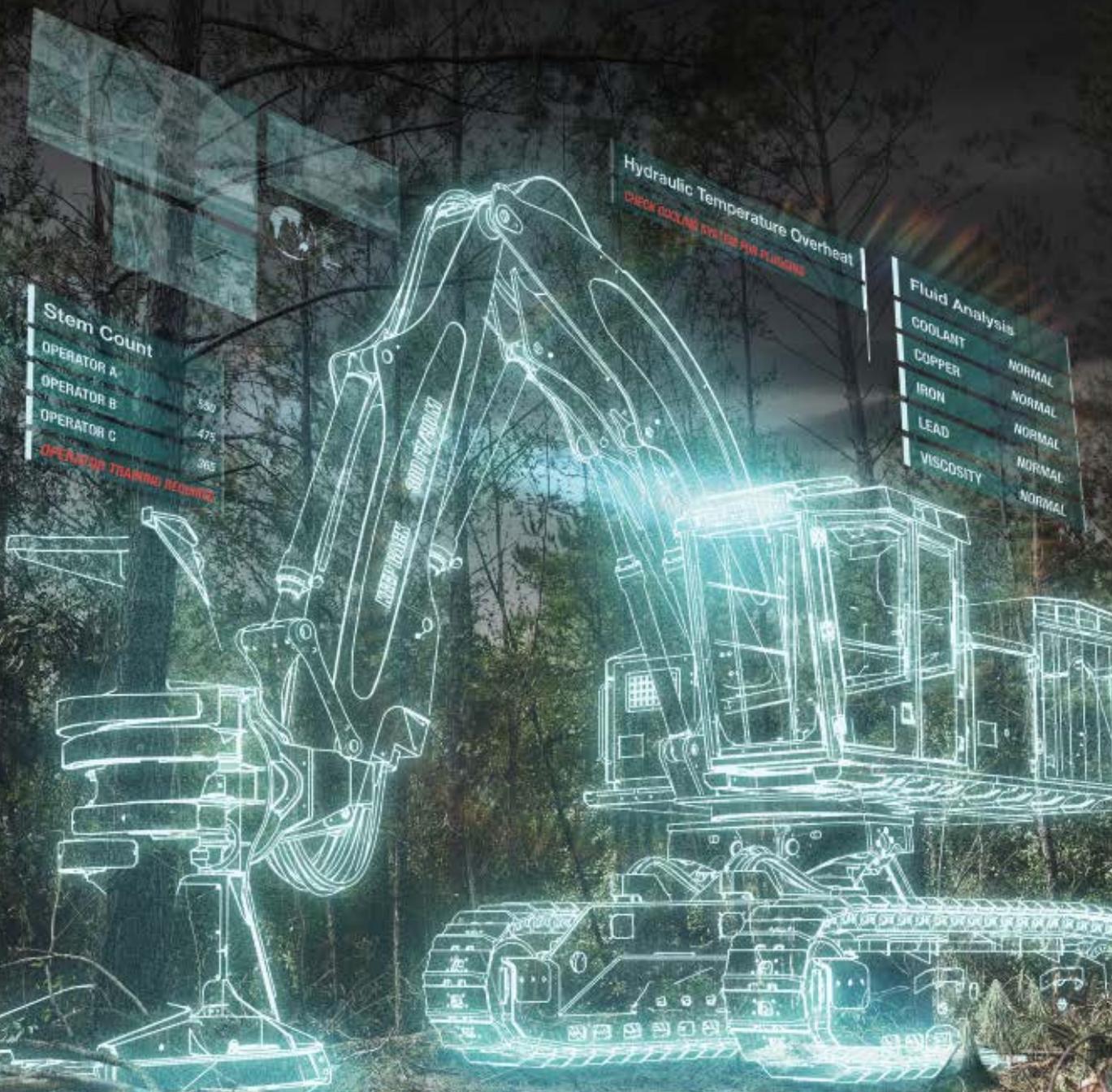
## Your dealer technology specialist can:

- Help with telematics and prognostics program enrollment and activation.
- Monitor incoming data from telematics systems and communicate those results to you in the way you want, such as documented reports, regular meetings, or as needed.
- Interpret telematics data to suggest changes to your operation, maximizing productivity and efficiency.
- Analyze machine health alerts to recommend preventative maintenance that will head off more expensive future downtime.
- Utilize remote-diagnostic and -repair capabilities to lower costs and improve uptime.
- Share data with other dealership departments so they can better serve you.
- Quote customized preventative-maintenance programs to help you manage costs.
- Provide training if you wish to monitor and act on data in-house.
- Coordinate implementation of an Application Programming Interface (API) for utilizing telematics data in your business system.



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- Three years of machine-health prognostics
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You can work with your dealer to add many other services that meet your unique needs. For example, the Ultimate Uptime package that is best for you may include the above services plus a customized support agreement, filter kits, fluid-sampling kits, comprehensive fluid sampling, three years of full-machine warranty, operator training, and more.

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**JDLINK™ machine monitoring system**  
See pages 6–8.



**Machine-health prognostics**  
See page 9.



**Remote diagnostics and programming**  
See pages 10–11.



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JDLink™ machine  
monitoring system  
See pages 6–8.

## Manage multiple machines from one place

Ever feel like you need to be in two places at once...especially when you're running more than one crew at a time? JDLink can help you centrally, smartly manage machines working at multiple sites, from the fleet-management fundamentals of knowing the hours and location of all brands, to sending machine-health alerts and tracking machine production on Deere machines. Your crew members can even download the JDLink app for free to their smart phones. Just knowing where machines are working saves time and reduces phone calls.

**Maps:** Current location, location history, and driving directions

**Alerts:** Diagnostic trouble codes and maintenance, security, or customizable alerts

**Engine hours:** Daily, weekly, and cumulative hours for maintenance planning

**Maintenance:** Enroll in a factory-recommended maintenance plan, and automatically track upcoming intervals due for all your enrolled machines in one place

**A family of telematics devices that suits the wide-ranging needs of your multi-brand fleet:**

SERVICE	JDLINK LOCATE
<b>Hardware</b>	Asset-Tracking Terminal
<b>Power required</b>	No
<b>Equipment brands</b>	All makes
<b>Equipment type</b>	Stationary and mobile equipment such as tool-sheds, chippers, grinders, mulchers, generators, compressors, welding machines, trailers, and skid steer loaders
<b>Benefit</b>	A value-priced, self-contained solution for equipment location and enhanced security — no electrical connection required
<b>Features</b>	<ul style="list-style-type: none"> <li>– Geofence</li> <li>– Machine grouping</li> <li>– Alert escalation logic</li> <li>– Dealer data services/third-party access</li> </ul>





Satellite communication



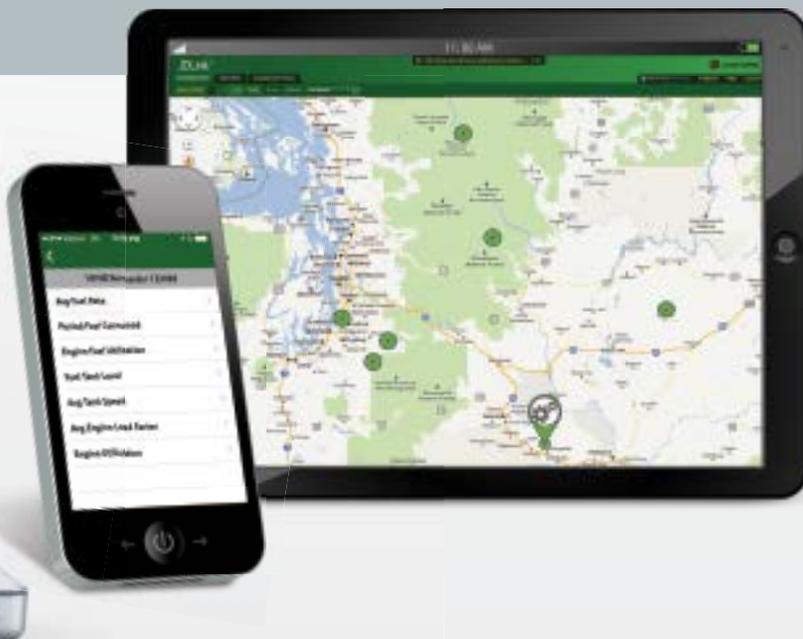
Cellular

### Choose the dual-mode option for connectivity on remote sites

If you work in extremely remote locations with spotty cell coverage, opt for the JDLink satellite module. JDLink will transmit via cellular coverage unless a connection can't be established — then JDLink switches to satellite mode to transmit information.

A machine communicating via satellite will report hours, location, alerts, and many other Ultimate data sets. Call-in frequency for a machine communicating in satellite mode is once per day. Red alerts and geofence violations are sent immediately at any time, just like when in cellular coverage. Available for JDLink Ultimate only.

JDLINK EXPRESS		JDLINK ULTIMATE
Fleet Management, OBD Terminal	Fleet Management, MC-3 Terminal	MTG/Satellite
Yes	Yes	Yes
All makes	All makes	John Deere
Stationary and mobile equipment with an On-board Diagnostics (OBD) port such as light-duty trucks and semis	Stationary and mobile equipment such as skid steer loaders, heavy-duty trucks, tank trucks, and tow trucks	John Deere forestry equipment working in remote and/or high-production applications — comes standard on new John Deere forestry machines with three years of service
A value-priced solution for location, security, and maintenance tracking requiring only a simple OBD connection	A value-priced, rugged solution for location, security, and maintenance tracking requiring only a three-wire connection	An ultra-rugged solution for harsh conditions; provides satellite compatibility; CAN bus data access provides the most complete machine and operator information; data can be integrated into customer's business process
<ul style="list-style-type: none"> <li>– Geofence</li> <li>– Curfew</li> <li>– Machine grouping</li> <li>– On-demand updates</li> <li>– Distance traveled</li> <li>– Engine hours</li> <li>– Maintenance tracking</li> <li>– Alert escalation logic</li> <li>– Dealer data services/third-party access</li> <li>– JDLink mobile app for Apple iOS or Android</li> </ul>	<ul style="list-style-type: none"> <li>– Geofence</li> <li>– Curfew</li> <li>– Machine grouping</li> <li>– On-demand updates</li> <li>– Distance traveled</li> <li>– Engine hours</li> <li>– Maintenance tracking</li> <li>– Alert escalation logic</li> <li>– Dealer data services/third-party access</li> <li>– JDLink mobile app for Apple iOS or Android</li> </ul>	<ul style="list-style-type: none"> <li>– Geofence</li> <li>– Curfew</li> <li>– Machine grouping</li> <li>– On-demand updates</li> <li>– Machine hours</li> <li>– Maintenance tracking</li> <li>– Equipment utilization and engine load levels</li> <li>– Fuel consumption</li> <li>– Operator-productivity indicators</li> <li>– Diagnostic trouble code alerts</li> <li>– Alerts sent to cell phone or email with escalation options</li> <li>– Remote-diagnostics and -programming capability</li> <li>– Dual-mode satellite option</li> <li>– JDLink mobile app for Apple iOS or Android</li> <li>– Dealer data services/third-party access</li> </ul>



*JDLink can be set up to send alerts via email or Short Message Service (SMS) text so you're always in the know. Alert escalation levels can be set to be sent to multiple contacts if acknowledgement is not received within a predetermined time period. There are also JDLink apps for Apple iOS, iPhone and iPad, and Android devices that provide machine location information, engine hours, the ability to view and acknowledge alerts, and JDLink Ultimate data such as fuel consumption and level, average ground speed, and engine utilization.*

**Visit [JohnDeere.com/jdlink](http://JohnDeere.com/jdlink) for an up-to-date listing by machine type of all data viewable through JDLink Ultimate.**



# Rugged and dependable hardware

HARDWARE	DESCRIPTION	SPECIFICATIONS	
 <p data-bbox="191 753 488 779">Modular Telematics Gateway (MTG)</p>	<p data-bbox="561 506 862 678"><b>JDLink Ultimate</b> hardware — known as the Modular Telematics Gateway (MTG) — is built tough to withstand harsh forestry equipment use. It is included in base on new John Deere forestry models, and is also available as a field kit.</p>	<p data-bbox="938 506 1484 779"><b>Connectors:</b> All rated at IP67 or better  <b>Input voltage:</b> 9-32VDC (switched and unswitched power)  <b>Current draw (maximum):</b> On, .03A; Sleep/Ears-On, 0.025A; Hibernate, 0.001A  <b>Operating temperature:</b> -40 deg. C to +75 deg. C  <b>Operating shock:</b> 3-axis, 25G to 85G in 10G steps, 1,000 shocks per step (must pass)  <b>ESD:</b> ISO 1065, 2001  <b>Storage temperature:</b> -40 deg. C to +85 deg. C  <b>Bench handling:</b> EAP-004, 90-percent probability of dropping one meter onto concrete</p>	
 <p data-bbox="399 995 505 1062">OBD-II Fleet-Monitoring Terminal</p> <p data-bbox="164 1146 261 1213">MC-3 Fleet-Monitoring Terminal</p>	<p data-bbox="561 827 878 1119">There are two Fleet-Monitoring Terminal field kits available for <b>JDLink Express</b>. One is for light-duty trucks and semis, and requires an OBD-II port for installation. The other is for equipment such as skid steer loaders, compact excavators, heavy-duty trucks, tank trucks, tow trucks, and other equipment with a battery. It features a simple three-wire connection. Both terminal types install inside the machine.</p>	<p data-bbox="938 827 1211 869"><b>OBD-II FLEET-MONITORING TERMINAL</b></p> <p data-bbox="938 873 1187 926"><b>Dimensions:</b> 43 x 64 x 25 mm (1.7 x 2.5 x 1 in.)</p> <p data-bbox="938 930 1122 951"><b>Weight:</b> 51 g (1.8 oz.)</p> <p data-bbox="938 955 1170 976"><b>Input voltage:</b> 7 to 20 volts</p> <p data-bbox="938 980 1211 1098"><b>Power consumption:</b> &lt;3 mA @ 12 volts (deep sleep); &lt;11 mA @ 12 volts (sleep on network); &lt;140 mA @ 12 volts (active standby)</p> <p data-bbox="938 1102 1166 1150"><b>Operating temperature:</b> -30 deg. C to +75 deg. C</p> <p data-bbox="938 1155 1162 1203"><b>Storage temperature:</b> -40 deg. C to +85 deg. C</p> <p data-bbox="938 1207 1208 1228"><b>Shock and vibration:</b> SAE J1455</p>	<p data-bbox="1240 827 1497 869"><b>MC-3 FLEET-MONITORING TERMINAL</b></p> <p data-bbox="1240 873 1495 926"><b>Dimensions:</b> 150 x 75 x 25 mm (6 x 3 x 1 in.)</p> <p data-bbox="1240 930 1430 951"><b>Weight:</b> 273 g (9.6 oz.)</p> <p data-bbox="1240 955 1495 1098"><b>Input voltage:</b> 12- and 24-volt systems  <b>Power consumption:</b> 10 mA @ 12 volts (sleep); 65 mA @ 12 volts (active); 300 mA @ 12 volts (transmitting)</p> <p data-bbox="1240 1102 1471 1150"><b>Operating temperature:</b> -40 deg. C to +85 deg. C</p> <p data-bbox="1240 1155 1468 1203"><b>Storage temperature:</b> -40 deg. C to +85 deg. C</p> <p data-bbox="1240 1207 1507 1228"><b>Shock and vibration:</b> SAE J1455</p>
 <p data-bbox="297 1457 496 1478">Asset-Tracking Terminal</p>	<p data-bbox="561 1272 886 1577">For <b>JDLink Locate</b>, the JDLink Asset-Tracking Terminal field kit utilizes an internal battery, so it can be used to provide location information and set up geofences for just about anything — toolsheds, generators, compressors, trailers, welding machines, and more. It can be attached with bolts, screws, or adhesive, and just needs clear access to the sky. Enables you to track and secure all your equipment with one application.</p>	<p data-bbox="938 1272 1386 1293"><b>Dimensions:</b> 55 x 55 x 260 mm (2.25 x 2.25 x 10.5 in.)</p> <p data-bbox="938 1297 1127 1318"><b>Weight:</b> 907 g (32 oz.)</p> <p data-bbox="938 1323 1425 1344"><b>Power:</b> 3.6-volt 57-Ah replaceable lithium internal battery</p> <p data-bbox="938 1348 1430 1396"><b>Power consumption:</b> &lt;1 mA (deep sleep); &lt;10 mA (sleep on network); &lt;70 mA (active standby)</p> <p data-bbox="938 1400 1370 1421"><b>Estimated battery life for two call-ins/day:</b> 5 years</p> <p data-bbox="938 1425 1354 1446"><b>Operating temperature:</b> -30 deg. C to +75 deg. C</p> <p data-bbox="938 1451 1328 1472"><b>Storage temperature:</b> -40 deg. C to +85 deg. C</p> <p data-bbox="938 1476 1442 1524"><b>Shock and vibration:</b> U.S. military standards 202G and 810F; SAE J1455</p>	

For optimal performance of the JDLink site, John Deere recommends the latest versions of these browsers: Microsoft Internet Explorer®, Google Chrome®, Mozilla Firefox®, or Apple Safari®.

## Ask about fleet-based pricing

When it's time to renew your JDLink subscriptions, we offer significantly discounted pricing based on the number of subscriptions required for your fleet. Ask your dealer for details.



# Advanced healthcare for your machines

John Deere ForestSight's machine-health prognostics evaluate machine data and "think through" maintenance protocols before prescribing downtime cures that will keep your fleet — and your bottom line — healthy.

## How do we do it?

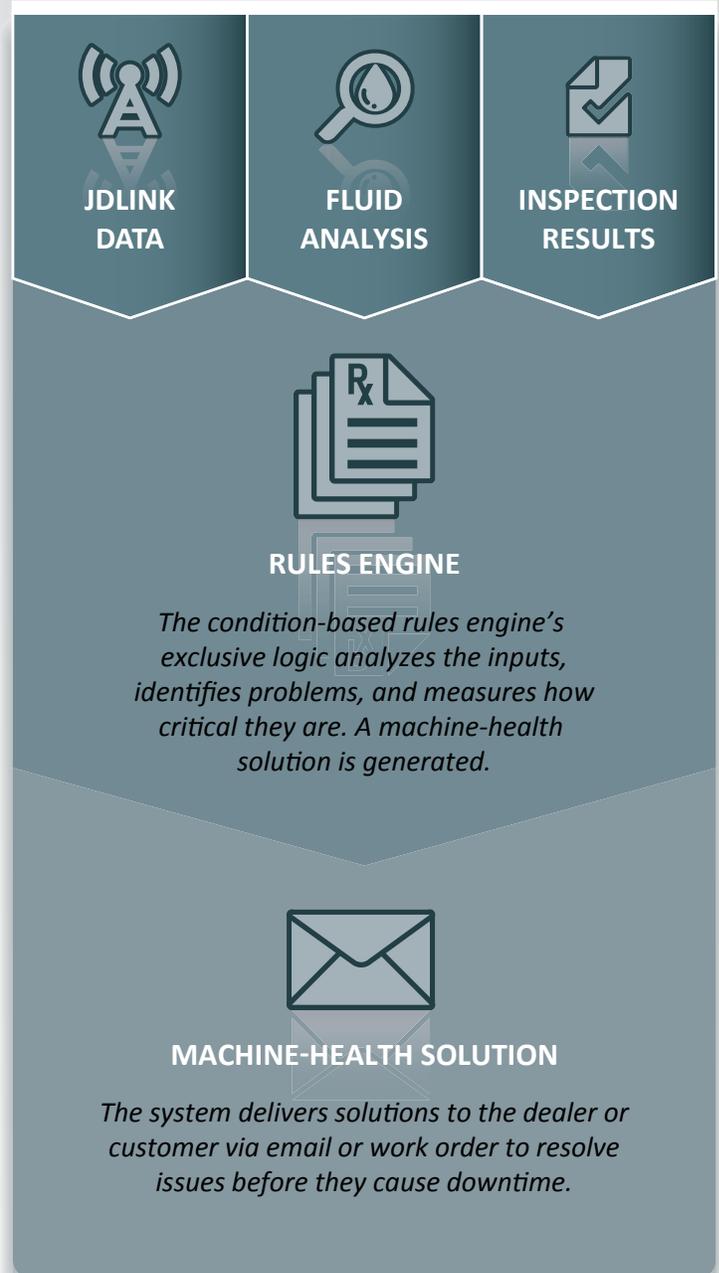
Advanced proprietary rules logic analyzes your machines' fluids to search for irregularities and their causes and solutions. We also combine JDLink™ and machine-inspection data. All three data points are examined together, and the exclusive condition-based rules-engine logic points to the problem, measures how critical it is, and provides solutions to resolve it before downtime occurs.

## A virtual fleet manager

When you utilize this John Deere ForestSight benefit, your dealer will receive machine-health alerts. So even if you don't have JDLink set to send you alerts and don't access its data often, your dealer will know immediately when something needs attention. You can focus on your work and not the health of your fleet.



## John Deere ForestSight's exclusive machine-health prognostics process:





# Faster, less costly repairs

What if your dealer could warn you of problems with your machine and initiate solutions without visiting the jobsite and charging you for a technician's travel time?

That's what you get with John Deere ForestSight's exclusive remote diagnostics and programming. Your Deere dealer can help you reduce downtime by accessing and resetting diagnostic trouble codes and recording performance readings remotely.

## Remote performance recordings

If your machine malfunctions at 1,000 rpm, for example, your Deere dealer can use remote diagnostics to record particular machine parameters at that rpm. The technician doesn't need to be onsite. And readings can be taken at full machine functionality, eliminating downtime.

If parts are needed to fix the problem assessed via remote diagnostics, the technician arrives onsite with the right parts without an initial trip to the field.

## Remote software updates

Using remote programming, your machine can also receive wireless software updates, forestalling a technician having to come to the jobsite with laptop in hand.

Your fleet-management and -maintenance team gain twice the bench strength when your dealer and your machines are connected through remote diagnostics and programming. The advantages to owning John Deere equipment just got a lot more compelling.

Three real-world examples of how John Deere ForestSight significantly optimizes uptime:

### EXAMPLE



## IMPROPER MACHINE OPERATION



**1** JOHN DEERE ForestSight sends "clutch temperature" alert to dealer from jobsite.



**2** Dealer accesses JDLINK™ website, reviews machine-performance data, and suspects the problem may be resulting from excessive inching pedal use.



**3** Dealer contacts customer and makes REMOTE DIAGNOSTICS connection — absence of additional transmission-related codes confirms that machine is healthy. Dealer clears code.



**4** DEALER confirms overall machine health is fine but advises the customer to instruct his operator not to ride the inching pedal.

**RESULTS:** Dealer detects improper machine operation with the potential to harm the transmission over time — without a trip to the jobsite.

EXAMPLE

2

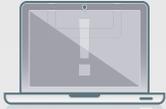
REMOTE SOFTWARE UPGRADE



1 Dealer receives a series of “engine derate” alerts from **JOHN DEERE ForestSight**.



2 Dealer contacts the customer, who confirms the machine is sluggish.



3 Dealer matches the derate symptoms and diagnostic code with a service bulletin that identifies the problem and requires a software update.



4 **DEALER** deploys an Electronic Control Unit (ECU) payload via **REMOTE PROGRAMMING** to update software and resolve the problem.

**RESULTS:** Dealer prevents downtime by correctly diagnosing and repairing the problem remotely.

EXAMPLE

3

RIGHT PART FOR THE JOBSITE



1 Customer contacts the dealer to report a malfunction with the bump shifter.



2 Dealer technician establishes **REMOTE DIAGNOSTICS** connection and records transmission data from the Transmission Control Unit (TCU) during machine operation. After analyzing the data, the dealer determines the TCU needs to be replaced. **JDLINK** records driving directions after locating the machine.



3 **DEALER** technician arrives with new TCU in hand for onsite repair.

**RESULTS:** Dealer sends a technician to the jobsite with the correct part for quick repair, avoiding an initial time-consuming diagnostic trip to the jobsite.



# Your dealer works for you

John Deere ForestSight™ technologies help optimize your machines, your uptime, and your jobsites, ultimately leading to improved profits. But don't let "technology" scare you. Because your John Deere dealer employs a technology specialist who can help you enjoy the benefits of John Deere ForestSight with as much or as little involvement as you desire.

*Whether you prefer to dig into the details or operate hands-off, your dealer's technology specialist can ensure that your John Deere ForestSight experience is exactly how you want it.*

Your dealer technology specialist can:

- Help with telematics and prognostics program enrollment and activation.
- Monitor incoming data from telematics systems and communicate those results to you in the way you want, such as documented reports, regular meetings, or as needed.
- Interpret telematics data to suggest changes to your operation, maximizing productivity and efficiency.
- Analyze prognostics to recommend preventative maintenance that will head off more expensive future downtime.
- Utilize remote-diagnostic and -repair capabilities to lower costs and improve uptime.
- Share data with other dealership departments so they can better serve you.
- Quote customized preventative-maintenance programs to help you manage costs.
- Provide training if you wish to monitor and act on data in-house.
- Coordinate implementation of an Application Programming Interface (API) for utilizing telematics data in your business system.

