

JOHN DEERE PRECISION AG TECHNOLOGY



JOHN DEERE



BETTER DECISIONS, RAPID RESULTS

JOHN DEERE PRECISION AG TECHNOLOGY



The world of farming is changing fast. Data enabled decisions play a key role in maximising yields and crop quality while optimising operational efficiency. Our precision technology helps you to run a profitable, sustainable business that will flourish.

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RECEIVERS & DISPLAYS

Would you like to significantly improve machine productivity, crop yield and quality while reducing cost of operation and increasing operator comfort? Our receivers and displays are where you get started.

Ever since John Deere released our first yield mapping and AutoTrac™ guidance solution over 20 years ago, our industry-leading precision ag solutions have continued to revolutionise farming practices. John Deere receivers and displays provide the hardware infrastructure you need to take full advantage of precision ag and set your business up for more success. We don't compromise on our backbone components as we understand how critical accuracy and system reliability are to your operation. This is why you will find many features already in base. With our wide array of optional functionality you can upgrade your system to match your farming needs, and as your business grows, you can continue to add greater functionality with some of the most sophisticated solutions on the market. If you choose our solutions, you can rest assured that you will experience industry-leading product performance.



GREAT COMFORT,
HIGHER
PRODUCTIVITY





GET YOUR BUSINESS ON TRACK

THE STARFIRE™ 6000 RECEIVER

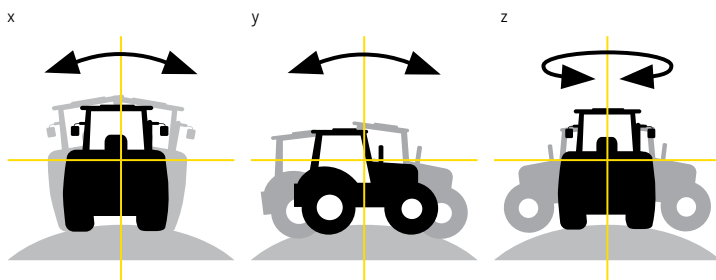
Accessing John Deere's precision farming solutions starts with the StarFire 6000 receiver. It features a dynamic design, a theft protection bracket, better serviceability and most importantly an enhanced signal range. This gets you ready for work in the field quicker and gives you higher accuracy and even better signal stability.

MULTIPLE STARFIRE TRACKING

The StarFire 6000 receiver tracks up to 3 correction signal satellites in parallel — thus offering the best correction signal and signal coverage that is 3 times better than previous receiver generations. It always actively chooses the best signal and if conditions change, it can switch 80% faster to the best geostationary satellite.

IN-SEASON REPEATABILITY

Guidance line shifts are a thing of the past. SF3 can deliver 9 months in-season repeatability*. So you can use the same guidance lines for multiple passes throughout the growing season, which allows precise placement of seed and nutrients without shifting lines or remapping boundaries.



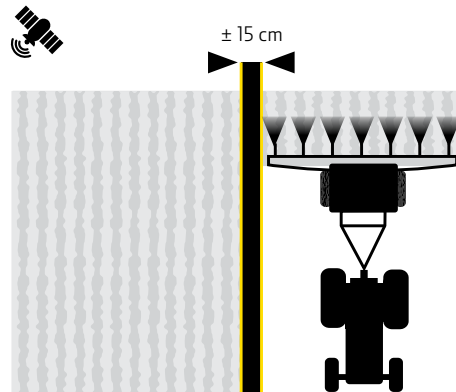
Reliable everywhere — The Terrain Compensation Module (TCM) detects and assesses roll (x), pitch (y) and yaw (z) to ensure true machine ground positioning across every field.

*Due to tectonic plate movement SF3 in season repeatability will vary by region. Contact your dealer for more information about SF3 repeatability in your region.



NEW

SECURITY
PIN-CODE FROM
2019

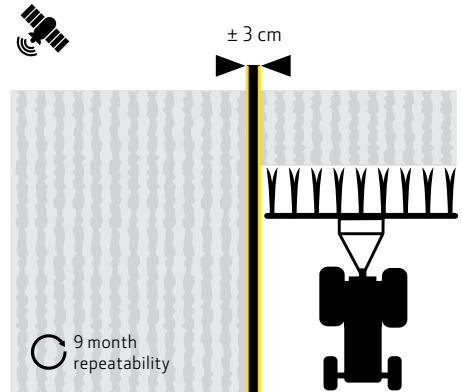


The best entry-level signal is now even better. You profit from a ± 15 cm pass-to-pass accuracy, previously ± 23 cm. Free of charge and with GLONASS included.

IMPROVED SF1 SIGNAL

The perfect starting point for tillage, grassland applications and harvesting:

- ± 15 cm pass-to-pass accuracy
- Multiple StarFire Tracking
- No licence fees
- Terrain Compensation Module (TCM) in base model
- GLONASS in base model



The SF3 signal delivers stunning ± 3 cm pass-to-pass accuracy and 9 months in-season repeatability*. Even better, the pull-in time is up to 4 times faster than with SF2. So you can spend more time working in the field instead of waiting on the headland or compromising quality.

A WHOLE NEW LEVEL: SF3 SIGNAL

More accuracy. Ideal for seeding and planting:

- ± 3 cm pass-to-pass accuracy
- Full accuracy in less than 30 minutes
- 9 months in-season repeatability*
- Flexible licence periods
- Easy upgradeable



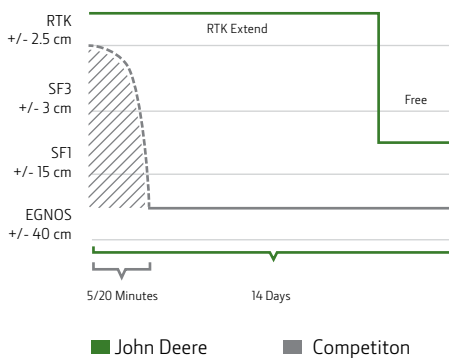
**+/-
2.5 CM**

**REPEATABLE PASS-
TO-PASS ACCURACY**

ULTIMATE ACCURACY AND REPEATABILITY: RTK

If high precision farming is your business, RTK is still your best solution when it comes to accuracy, repeatability and pull-in time. RTK eliminates any possibility of Global Navigation Satellite System drift and offers you unique +/- 2.5 cm pass-to-pass accuracy within 20km of the RTK base station.

Signal stability
with improved RTK extend



LONG-TERM REPEATABILITY AND < 1 MIN PULL-IN TIME

With RTK you only need to record field boundaries once. If you need this repeatability for e.g. Section Control you will not want to come back and record boundaries every year. You will save time every day: full RTK accuracy is always available from the very start. It takes less than 1 minute.

UNIQUE: 14 DAYS OF RTK EXTEND™

As a StarFire™ 6000 RTK customer you receive up to 14 days of RTK Extend free of charge. If your line of sight to the base station is interrupted and you lose correction signal, you can continue to work with full RTK accuracy for 14 days.

Radio RTK works with a static local base station in or near your field. This can be your own base station or a dealer-run base station network. It monitors the constellation of GPS/GLONASS satellites and continually transmits the high accuracy +/- 2.5 cm horizontal pass-to-pass correction signal to the StarFire Receiver on the RTK-equipped vehicle. A great solution, especially if you work in wide open terrain with good line of sight to the base station.





DISPLAYS THE WAY YOU WANT THEM

We offer you a full range of integrated and universal displays to fit your individual needs. Our Gen 4 displays have two things in common: the exact same, easy to use and wonderfully intuitive user interface, and fully certified ISOBUS AEF compatibility. We're committed to multi-brand compatibility and want to make it easy for operators to switch between equipment.

All Gen 4 displays feature tablet-like swipe functionality with run pages. The user interface is fully customisable, so that you can adapt the display layout to your preferences, and the displays feature on-screen and context-based help functions. With Remote Display Access professional support is just one click away. All Gen 4 displays come with documentation, variable rate application free of charge, and are capable of wireless data transfer*.



POWERFUL INTEGRATED DISPLAYS

Our integrated Generation 4 CommandCenter™ Displays are easy and intuitive to use, with tablet-like swiping, on-screen context-based help and a fully customisable user interface.



4200 COMMANDCENTER

The 4200 CommandCenter features a 21.3 cm (8.4") touchscreen that is now 20% larger and includes one video input. Documentation, variable rate functionality and full ISOBUS AEF certification come standard. Remote Display Access gets you one-click remote support and Wireless Data Transfer lets you exchange display set-up and documentation data with the John Deere Operations Center.



4600 COMMANDCENTER

The 4600 CommandCenter features a 26.4 cm (10") touchscreen and up to four video inputs. Like the 4200 display, documentation, variable rate functionality and full ISOBUS AEF certification come standard, but the 4600 display also includes AutoTrac™ guidance as base equipment. The 4600 can be paired with an Extended Monitor for greater display real estate and offers multiple software upgrade options for advanced precision ag applications.

EXTENDED MONITOR

The Gen 4 Extended Monitor doubles the screen area so you can monitor and control more functions simultaneously — like viewing vehicle control functions on your primary display and precision ag applications on the Extended Monitor. Functionalities can be easily moved between monitors to allow you the utmost flexibility and customisation.





PORTABLE FLEXIBILITY

If you run a mixed fleet, these are the portable siblings of our integrated Generation 4 CommandCenter Displays. Documentation, variable rate application and wireless data transfer capability are free of charge for all Gen 4 displays.

NEW

**4240 DISPLAY
IS WEATHER-
RESISTANT**



4240 UNIVERSAL DISPLAY

The 4240 display features the same screen size and functionality as the integrated 4200 CommandCenter, but in a portable format that's weather-resistant. Documentation and variable rate application come standard, and it's ready for Remote Display Access and Wireless Data Transfer.



4640 UNIVERSAL DISPLAY

Like the integrated 4600 CommandCenter Display, the 4640 Universal Display has a 26.4 cm (10") touchscreen and four video inputs. It comes with AutoTrac guidance as base equipment and is capable of, and ready for, all advanced Precision Ag features.



ACTIVATION OPTIONS

When your farming practices and needs evolve over time and require advanced functionalities, our activation options have you covered.

You can easily upgrade the integrated Generation 4 CommandCenter™ Displays as well as the Universal Displays at any time to the Premium activation or Automation subscriptions and get all the sophisticated features modern farming requires.

FARM BETTER

PRECISION AG PAYS OFF

GEN 4 ACTIVATION & SUBSCRIPTIONS LEVELS

PRECISION AG APPLICATION	4600 COMMANDCENTER Tractors & Combines	4600 COMMANDCENTER Sprayers	4640 UNIVERSAL DISPLAY Universal	4240 UNIVERSAL DISPLAY Universal
Documentation	■	■	■	■
AutoTrac™	■	■	■	□
Data Sync	□	□	□	□
Section Control	□	□	□	□
AutoTrac RowSense™	□	□	□	
In-Field Data Sharing	□	□	□	
AutoTrac Turn Automation	□		□	
AutoTrac Implement Guidance – Passive	□		□	
Machine Sync	□		□	

■ In-base price □ Optional through activation/subscription

AEF* CERTIFIED ISOBUS CAPABILITIES OF THE JOHN DEERE DISPLAY FAMILY

	4200 COMMAND CENTER	4600 COMMAND CENTER	4240 UNIVERSAL DISPLAY	4640 UNIVERSAL DISPLAY
Universal Terminal (UT)	■	■	■	■
Section Control (TC-SC)	■	■	■	■
Documentation (TC-Bas)	■	■	■	■
Documentation (TC-GEO)	■	■	■	■
Joystick (AUX-N)	■	■	■	■

AEF Certified



- ✓ UT
- ✓ TECU
- ✓ AUX-N
- ✓ TC-BAS
- ✓ TC-SC

*AEF = Agriculture Industry Electronics Foundation, webpage: www.aef-online.org



GUIDANCE & MACHINE AUTOMATION

John Deere pioneered machine guidance systems and we have continued to innovate ever since. The benefits are evident: lower fuel costs, reduced fertiliser, seed and chemical usage, higher productivity and profitability. And considerably less stress for the operator.

PRODUCTIVITY
INCREASES
OF UP TO

14%**



THE PATH TO HIGHER PRODUCTIVITY

We offer a complete range of flexible guidance systems. If yours is a mixed fleet, we also offer solutions for other brands so that you can still enjoy the benefits of John Deere guidance.

John Deere AutoTrac™ for instance reduces overlap so that input costs and fuel consumption are reduced, while the work rate is increased. Depending on the application you can expect input savings of up to 8%* and productivity increases of up to 14%** . Because precision is ensured, tasks can be completed faster, even in low visibility conditions, and always with the same level of accuracy. The operator, relieved of the stress and fatigue of steering, can concentrate on implement management and performance, all of which is good news for the productivity of your operations.

*From "Lohnunternehmen" 1/2010

**From "Landtechnik" 6/2006



SHARING JOHN DEERE EXPERTISE

The AutoTrac Universal 300 steering kit delights with a much quicker line acquisition, reduced noise and a more integrated design.

AUTOTRAC UNIVERSAL 300

AUTOMATED STEERING FOR MIXED FLEETS

YOUR BENEFIT

- Premium John Deere guidance across mixed fleets
- Benchmark < 30 minutes machine-to-machine transfer time
- Minimum speed of only 0.5 km/h
- Water and dust resistant
- Faster line acquisition

Our proven, multi-brand, automated steering solution can be fitted to more than 600 different machines, from older John Deere models to alternative brands.

The ATU 300 unit can be easily transferred from machine to machine in less than 30 minutes. It's not only easy to install and use, it's also extremely robust, reliable and now even approved for open operator station tractors. The ATU 300 enables operation at only 0.5 km/h, slower than other universal systems.



AUTOTRAC™ CONTROLLER

PRECISION GUIDANCE FOR MIXED FLEETS

Older John Deere machines, as well as machines from other manufacturers, can also benefit from the full potential of John Deere guidance. Just install AutoTrac Controller and you'll enjoy the very fast line acquisition that only complete component integration can bring. And you'll have very similar guidance convenience to that you get on the latest John Deere machines.

Your John Deere dealer can advise you on the suitability of your machine. AutoTrac Controller is available for over 380 approved models from:

- John Deere
- Fendt
- Case
- New Holland
- Deutz-Fahr
- Massey Ferguson

+ YOUR BENEFIT

- Enables integrated high-precision guidance to mixed fleets
- Keep original steering wheel and cab design
- Compatible with John Deere Active Implement Guidance





AUTOTRAC

BOOST YOUR PRODUCTIVITY

YOUR BENEFIT

- Less operator stress
- Fewer passes with reduced overlap
- Up to 8%* input cost reduction
- Up to 14%** productivity increase
- Longer working days in low visibility conditions
- Reduced soil compaction

PRECISION FROM THE START

AutoTrac boosts your productivity while reducing input cost on fuel, fertiliser and chemicals and adding enormous comfort. Even in challenging conditions such as low visibility (e.g. at night, dust, fog) or rolling terrain, your field is always being worked with flawless accuracy to ensure ideal crop spacing. Once you have experienced the benefits of AutoTrac, you will never want to go back!

AUTOTRAC NOW CONNECTED

Safely store, back-up and maintain your AutoTrac set-up data like machine and implement offsets, boundaries, guidance lines in the John Deere Operations Center.

*From "lohnunternehmen" 1/2010
**From "landtechnik" 6/2006



AUTOTRAC TURN AUTOMATION

IMPRESSIVE, PERFECT HEADLANDS

AutoTrac Turn Automation on 6R to 9R Series tractors automatically controls the entire headland turn and manages all tractor and implement functions with ease and precision. This includes forward speed changes, SCV Extend & Retract, PTO switching and the raising or lowering of linkages at exactly the right time and position in the field. Perfect headland turns – with any operator and in any conditions.

+ YOUR BENEFIT

- Reduced headland skips and overlaps
- Reduced input costs for fertiliser, chemicals and fuel
- Perfectly consistent crop growth and health at headland
- Minimised soil compaction at headlands
- More comfort, less operator stress



AUTOTRAC TURN AUTOMATION

AutoTrac Turn Automation on Gen 4 displays now comes with a new intuitive user interface.



NOW FOR MORE MACHINES

AutoTrac Vision is available for 7R, 8R/8RT, and 9RX Tractors and R4040i/R4050i and 4 Series Sprayers.



The high-resolution front mounted camera spots it all.



AUTOTRAC VISION

ELIMINATE CROP DAMAGE

+ YOUR BENEFIT

- Benefit from automated steering even in fields that have been planted without a guidance system
- Reduced crop damage
- Faster working speeds of up to 30 km/h
- Cover 20% more hectares per day

AutoTrac Vision uses a front-mounted camera to see early-season corn, soybeans and cotton at least 10 cm to 15 cm high, and will also work with controlled traffic in small grains. It keeps vehicle wheels in the centre between rows and reduces yield robbing crop damage in fields that have been planted without an automated guidance system or for which guidance lines are not available.



Variable combination options – Self-propelled sprayers can be equipped to utilise AutoTrac Vision only, AutoTrac RowSense only, or both, depending on the desired operating window.



AUTOTRAC IMPLEMENT GUIDANCE — PASSIVE

AUTOMATICALLY COMPENSATE IMPLEMENT DRIFT

+ YOUR BENEFIT

- Perfect path to path accuracy in rolling terrain with pull-type implements
- Less operator stress
- Consistent seed placement and crop growth

AutoTrac Implement Guidance — Passive now delivers a surplus compared to the single AutoTrac solution: In uneven terrain and slopes the weight of your pull-type implement will cause it to drift. The results are gaps and overlaps that affect the quality of work. Irrespective of the terrain, you can now experience the highest precision standards in all your seeding, planting and tillage operations.

A second StarFire™ Receiver installed on the implement communicates the implement's exact position to the tractor's AutoTrac™ system. The tractor then changes its path to compensate for the implement drift to gain a perfect pass-to-pass result.

AUTOTRAC IMPLEMENT GUIDANCE — ACTIVE

FOR ULTIMATE PRECISION

When the highest accuracy is an absolute must, Active Implement Guidance ensures that tractor and implement follow exactly the same path, ruling out crop damage on subsequent passes. Active Implement Guidance is perfect for applications that require absolute precision such as Controlled Traffic Farming (CTF) with inter-row or inrow seeding.

The system works with steerable implements equipped with side-shift, drawbar, axle or disc steering. StarFire Receivers are mounted on both tractor and implement, allowing them to communicate with each other and ensuring absolute precision on the ground. Straight, curved or circular tracks can be followed, using RTK or SF3 signals. The Shared Signal functionality allows two StarFire Receivers to share correctional signals in dual-receiver applications, providing the benefits of the higher signal level.

+ YOUR BENEFIT

- Tractor and implement are kept on the same track
- Seed between previous stubble rows and keep the tractor on Controlled Traffic Farming (CTF) tracks
- No crop damage
- No irrigation pipe or drip tape damage
- Perfectly straight furrows and even seed beds

Active Implement Guidance

Active Implement Guidance pairs up with the implement steering mechanism, which allows both the implement and tractor to stay on the same guidance line.





NOTHING WASTED

Perfectly synchronised efficiency between multiple resources in the field — no waste, more productivity.

MACHINESYNC

COORDINATED WORK

MachineSync enables the GPS-based synchronisation of speed and steering between combine and tractor with chaser bin during unloading in the field. This ensures even filling of the chaser bin without losses and reduces the risk of vehicle collision, especially in dusty conditions.



+ YOUR BENEFIT

- Eliminates waste during unloading
- Easy unloading on-the-go to maximise productivity
- Less operator stress
- Facilitates coordination of 2 or more machines in 1 field



THE FULL PICTURE

See everything that's happening in your fields and use the information to make better decisions faster, save resources and increase efficiency.



IN-FIELD DATA SHARING

KNOW MORE, FARM BETTER

+ YOUR BENEFIT

- Share maps and vehicle positions for optimum efficiency
- Reduce over-application with shared coverage maps
- Match coverage and guidance lines between machines for easy setup

In-field data sharing lets you see coverage and as-applied maps for machines working in the same field at the same time. It's how you can make sure that you get complete field coverage with multiple machines even in low light and/or dusty conditions, while you reduce over-application, obtain more accurate documentation data and lower input costs.

TRACTOR IMPLEMENT AUTOMATION

PERFECT RESULTS EVERY TIME

Tractor Implement Automation manages automatic adjustments of electronically controlled tractor functions. This award winning concept not only enables maximum productivity and consistent work results at all times but also reduces operator fatigue and stress.

Compatible with
– John Deere Round Balers

John Deere 400R fixed chamber balers and 900 Series round balers no longer need a separate implement-specific baler automation activation. John Deere V451R and V461R round balers feature this capability in the base configuration. 900 Series balers can easily be upgraded by your dealer back to model year 2012. All that is required to make it a plug and play solution is the Tractor Implement Automation Activation.

+ YOUR BENEFIT

- Simplified operation: e.g. one touch, one bale
- Maximise throughput
- Higher productivity
- Relaxed working and reduced stress for the operator
- Consistent bale quality, planting and other work results
- Reduced fuel consumption





+ YOUR BENEFIT

- Maximise operator comfort
- Maximise harvest efficiency
- Enable even less experienced operators to harvest with peak productivity
- Harvest day and night with minimal spillage

ACTIVE FILL CONTROL

STRESS-FREE FORAGE HARVESTING

Imagine how much easier things would be if the spout of your forage harvester was controlled automatically. As an operator you could relax while ensuring optimal fill and avoiding any crop spillage. You could fully concentrate on general machine operation and settings for optimum overall performance.

John Deere Active Fill Control utilises a stereo camera to control the rotation and flap position of the spout automatically. The system can actively track transport vehicles and aim the crop from the best position to execute a desired fill strategy. It automatically fills trailers to maximum capacity while allowing the operator to focus on productivity-related tasks such as machine optimisation. Active Fill Control can also adjust spout positioning automatically in rear-unload conditions when e.g. opening a new field.

AUTOTRAC™ ROWSENSE™

GREATER HARVEST EFFICIENCY

Whether It's down corn, curves or simply harvesting a field with uneven row spacing because it has been planted without AutoTrac: AutoTrac RowSense helps you to always stay in the right row, enabling you to concentrate on the machine, while maintaining speed and significantly reducing operator stress.

Designed for AutoTrac-ready combines and forage harvesters, this leading edge technology combines feeler data gathered from the row sensor with satellite position data from the StarFire™ Receiver, allowing you to reach greater levels of productivity.

➕ YOUR BENEFIT

- Allows use of automatic guidance in corn that has been planted without a guidance system
- Improves harvest efficiency even in harsh conditions
- Improves yield quality
- Reduces operator stress



NEW: ON S700 SERIES COMBINES

AutoTrac RowSense is now part of the CommandCenter™ Premium activation.





PRECISION AG SOLUTIONS

John Deere precision ag solutions allow you to control and budget your costs more accurately, including your costs for fertiliser, seeding and chemicals.

With real-time sensor data and site-specific documentation you gain valuable insights, can make fact-based decisions and create accurate prescriptions for your next field tasks. What's more, they save on that most precious resource of all: your time.

- Accurately control your costs — with variable rate applications you can precisely budget fertiliser, seeding and chemicals.
- Cut down on paperwork — all the information you need is at your fingertips, including reliable crop traceability, and legal compliance.
- Farm more sustainably — precisely control your inputs to minimise waste and avoid over-fertilising or over-seeding.
- Enjoy faster set-up — optimise your equipment once, use the same settings time after time. All our systems are fully integrated too, so you can adapt as your needs grow.

LESS

WASTE

LESS

PAPERWORK



SECTION CONTROL

NO MORE OVERLAPS, NO MORE WASTE

John Deere Section Control automatically turns individual implement sections on and off at predefined locations in the field. The system is compatible with all John Deere implements supporting section control functionality as well as with AEF ISOBUS Task Controller Section Control (TC-SC) compliant implements from other brands.

By reducing product overlap and gaps in the field, John Deere Section Control enables you to apply exact amounts of fertiliser, seed and crop protection — where they are needed. As a result, you cut input costs and increase efficiency while minimising crop damage and environmental impact. And by avoiding overspray and overplant, John Deere Section Control also helps to create the best possible growing conditions for your crops.

YOUR BENEFIT

- Reduced input costs
- Less crop damage and environmental impact
- Equally spaced crops and consistent growth conditions
- No spraying outside of field boundaries



Gen 4 displays support control for up to 255 individual implement sections. Providing you with maximum precision and cost saving opportunities.





SECTION CONTROL FOR NON-ISOBUS IMPLEMENTS

LESS CLUTTER IN THE CAB

The compact GreenStar™ Rate Controller enables rate and section control of non-ISOBUS implements by serving as the interface for your display. You can automatically control fertiliser, chemical, nutrient and seed delivery without the need for a second console in the cab. GreenStar Rate Controller integrates with many implements, such as John Deere or non-John Deere pull-type sprayers, liquid manure spreaders, liquid fertiliser systems and planters.

+ YOUR BENEFIT

- Less crop damage
- No overplant
- Reduced input costs
- Reduced operator fatigue
- Upgrade older implements to section control functionality



The John Deere Rate Controller 2000 is compatible with many different equipment platforms, including non-John Deere pull-type sprayers, liquid and dry fertiliser systems, anhydrous applicators and some planters.





JOHN DEERE MOBILE WEATHER

Mobile Weather uses a sensor to display and document real-time weather on the Gen 4 family of displays, including, wind speed and direction, Delta T,* temperature, and relative humidity. Unlike other systems, which force you to stop spraying, climb out of cab and use a hand-held device to check prevailing weather conditions, Mobile Weather lets you make in-cab product application decisions based on location-specific data. You can also input your own spraying parameters into the system, and receive notifications when the present conditions are outside these preset parameters. All Mobile Weather data can be documented to the John Deere Operations Center to assist meeting regulatory spraying requirements.



+ YOUR BENEFIT

- Know current weather conditions including wind speed, wind direction, and humidity
- Improves recordkeeping and compliance reporting

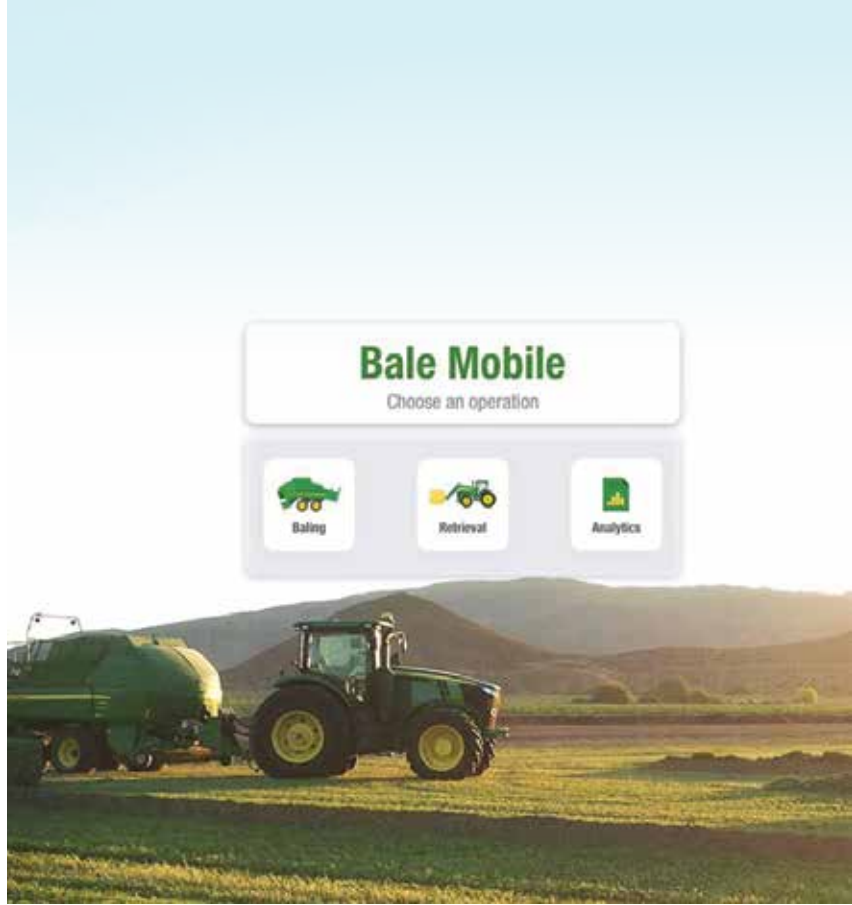
*Delta T is an important indicator for determining acceptable spraying conditions. It indicates evaporation rate and droplet lifetime and is calculated by subtracting the wet bulb temperature from the dry bulb temperature.



BALE MOBILE APP

FOR LARGE SQUARE BALERS

Similar yield data that has been available for crops like wheat and canola is now available for hay, thanks to the large square balers and the Bale Mobile app. The One Series Large Square Balers measure moisture and weight for each bale. This app takes that real-time information to a whole new level, whether baling, loading, or in the office managing.



+ YOUR BENEFIT

- Get moisture and weight information on the go
- Get more information to make better decisions

BALING

The operator in the tractor can see information as the app documents the baling process. The moisture and weight are tagged to the individual bale. If a bale is too wet, the operator can immediately decide whether to apply preservative or even stop baling. Bale Mobile also has the option to tag bales so they can be easily identified when sorting. After baling in a field, a summary will show the crop, number of bales, and average moisture, even if there is more than one baler running.

LOADING AND MOVING BALES

When loading trucks or moving bales, Bale Mobile uses this same data to help plan more efficiently. It gives users the option to sort by moisture, weight, and if preservative has or has not been applied. It will help keep the wet or weedy bales out of the stack and load trucks for optimal weight.

MANAGEMENT

From the office, producers can see where the balers are and how well they are working while managing operations and making sound decisions. A summary will show yield information by field to help decide on irrigation, fertilizer, or replanting before next season. This documentation can even be shared with landlords and trusted advisors.

From baling to loading and planning, the John Deere Bale Mobile app allows producers to get more information, improve efficiency, and make better decisions.

YIELD DOCUMENTATION

SPECIALTY CROPS

Documentation of potatoes, onions, sugar beets and other specialty crops harvest data is now possible with Yield Documentation, Specialty Crop. Yield Documentation, Specialty Crop enables producers to document harvest information from weight-based, conveyor driven harvesting equipment.

View instantaneous yield information and totals on the go with Yield Documentation, Specialty Crop and the GreenStar™3 (GS3) 2630 Display. Yield Documentation, Specialty Crop is compatible with the GS3 2630 Display; the display provides on-screen mapping, in-cab visualization in color and, by color-coding each pass on a map, the display provides a real-time picture of the crop harvested.

Easy access to harvest yield information and percent trash enables producers to make future agronomic decisions based upon site specific data. Transfer the harvest documentation data into the John Deere Operations Center via USB or Wireless Data Transfer (WDT) for further analysis and generation of future variable-rate prescriptions.

YOUR BENEFIT

- Get yield mapping information on the go
- Get more information to make better decisions





HARVESTLAB™ 3000

ONE SENSOR THREE APPLICATIONS



AWARD WINNING TECHNOLOGY

HarvestLab technology has proven itself in the field for years, and is a consistent favourite on the awards circuit.

Developed and patented with Carl Zeiss, the HarvestLab 3000 sensor uses near-infrared (NIR) spectroscopy to analyse various constituents within harvested crops and silage. Already in 2009 the technology had been certified by the Deutsche Landwirtschafts Gesellschaft (DLG) for dry matter analysis of corn silage with only negligible deviations between 0.67 and 1.85%. Our various calibrations have been further refined, adding more samples from more crop types, varieties/feeds and regions year after year.

The new HarvestLab 3000 hardware reflects state-of-the-art technology and builds on millions of hours of in-field experience. The sensor can consider a 12% wider wavelength spectrum for additional accuracy and provides more than 4,000 measurement points per second. Typically this equals up to 1 million measurements per load. It provides you not simply one random sample value, but statistically solid data on-the-go. Errors that usually occur during manual sample collection are completely eliminated. Last but not least, all data is displayed and site-specifically documented in real time. This allows operators to adjust settings and enables automated machine optimisation while still in the field instead of waiting several days for laboratory results.

USE IT ON A FORAGE HARVESTER

Crop moisture can vary by up to 20% in a single field requiring different length of cut to ensure ideal silage compaction without oxygen enclosures. Fitted to a John Deere forage harvester, the HarvestLab 3000 enables automated length of cut adjustment based on dry matter content. Automatic silage inoculant rate adjustments help to optimise fermentation and can save you up to 10% of silage additives.

Besides dry matter, you can also get highly accurate, real-time readings on crude protein, starch, crude fibre, NDF, ADF, sugar and crude ash. This enables you to invoice or purchase harvested crop based on quality, not quantity. By viewing and comparing all site-specific documentation data in the John Deere Operations Center, you can make fact-based decisions on e.g. variety selection and crop nurturing. During the off-season you can prepare professionally for an even more successful next season.

+ YOUR BENEFIT

- Automatic length of cut adjustment based on dry matter for better bulk density and silage quality
- Accurately adjust silage inoculant dosing to optimise fermentation
- Make informed decisions regarding crop variety selection for the next crop season
- Constituent information can be printed directly in the cab



CROPTYPE	MOISTURE/ DRY MATTER (DM)	CRUDE PROTEIN (XP)	STARCH	CRUDE FIBRE (XF)	NDF _{OM}	ADF _{OM}	SUGAR (XZ)	CRUDE ASH (XA)
Corn	■	■	■	-	■	■	-	-
Whole Crop Silage	■	-	-	-	-	-	-	-



USE IT AS A MOBILE LAB

+ YOUR BENEFIT

- Complete constituent evaluation for farmers, biogas plant operators and nutritionists
- Real-time detection of feed quality
- Easily plan winter feeding
- New user friendly web-interface

The HarvestLab™ 3000 can also be used as a laboratory unit at a storage facility or office, providing value all year round. Connecting to a vehicle power outlet keeps you completely mobile and provides you with instant information wherever you are. Real-time results help you to ensure proper clamp management, accurate feed rationing and livestock health. As a result you can save on supplements while achieving higher yields in beef, dairy or biogas production and ultimately achieve higher business profitability. Our brand new web interface provides step by step instructions and nicely visualises the data, helping you to make the right choices.



Daily analysis is critical to ensure proper clamp management, feed rationing and livestock health. As a result you can save on unnecessary supplements while achieving higher yields in beef, dairy or biogas production and ultimately higher business profitability.

iGRADE™

LAND-LEVELLING MADE EASY

The ideal way to plane or level your land accurately is with John Deere iGrade. Unlike delicate laser systems, this RTK-based system works reliably in poor visibility and rough weather conditions — even at night. The StarFire 6000 Receiver is compatible with GPS and GLONASS satellites, ensuring the highest vertical precision. Whether you're making constant slopes for draining or perfectly levelled planes for speciality crops, you can rely on iGrade to perform smoothly and accurately every time.

The system fully automates scraper blades while calculator tools assist operators in designing slopes and setting directions. In combination with the T3RRA Cutta precision terrain solution software from T3RRA, iGrade allows for professional planning of levelling and even optimised routing.

+ YOUR BENEFIT

- Reliable in rough weather and low visibility conditions (dust, fog)
- Compatible with T3RRA software
- User-friendly slope calculator tool
- Larger signal range than with laser
- Allows multiple machines to work in different planes at the same time



CONNECTED FARM MANAGEMENT

You're managing a complex enterprise. So streamlining operations is a good way to improve your overall efficiency. To do it, you need to be connected to everything that's going on in the business.

OPERATIONS CENTER

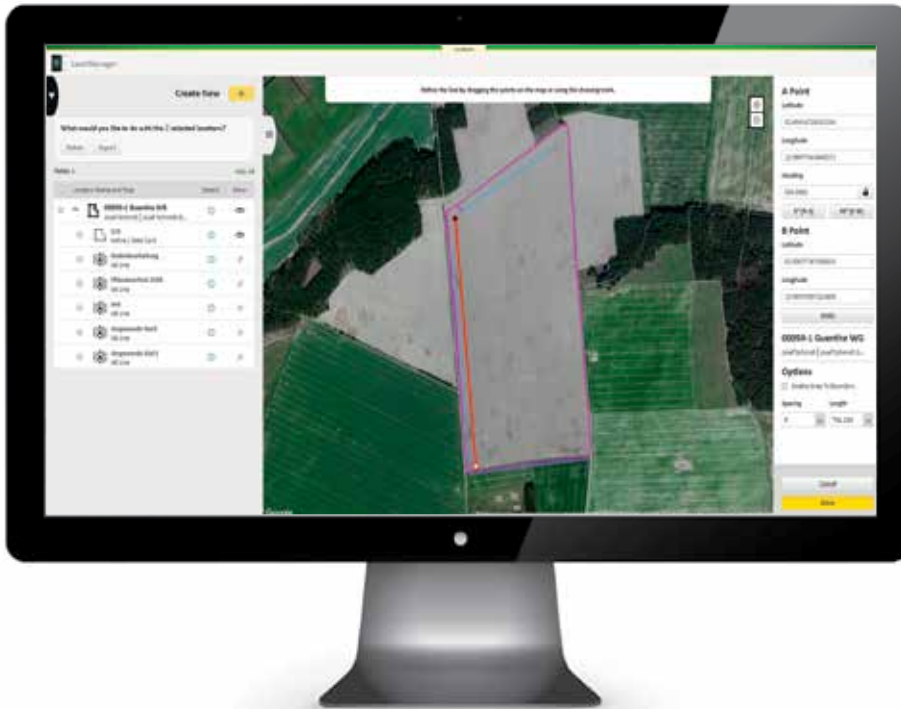
The Operations Center on our MyJohnDeere.com Ag web portal makes that happen for you. It connects you to your machines, your operators and your fields in one central location. It also allows you to seamlessly exchange information with your John Deere dealer, your contractor or other trusted partners.



MYOPERATIONS APP

John Deere MyOperations takes remote management of your field operations and equipment to the next level. It connects with the John Deere Operations Center, empowering you to evaluate expected vs. actual performance of job execution and machine utilisation.





CONNECT IT

For the fastest path from your plans to your in-field displays.

LAND MANAGER

CONNECT TO REDUCE IN-FIELD SET-UP TIME

+ YOUR BENEFIT

- Quick and easy in-field display set-up
- Automated, reliable and error-free documentation
- Automated data back-up

Connect AutoTrac to the John Deere Operations Center and carefully plan your jobs during off-season to make sure that everything goes smoothly during peak season. You can easily create, edit or delete display set-up data like clients, farms and fields, boundaries, guidance lines or machine and implement off-sets in your personal Operations Center account.

New field boundaries can be easily imported from a farm management software via shapefile. You can also draw them online or modify any existing boundaries, which is a great help for first time field localisation, especially if you contract or use seasonal employees. When you're done you can wirelessly send all data to the machines you select at the push of a button – eliminating time-consuming and error-prone manual set-up on multiple displays in the field. When you approach a new field, the related client, farm and field data will automatically be detected. Upon confirmation, the boundaries are loaded, and the preferred guidance line can be chosen from a pre-populated list. Finally, your display data is always backed up.

DATA MANAGEMENT

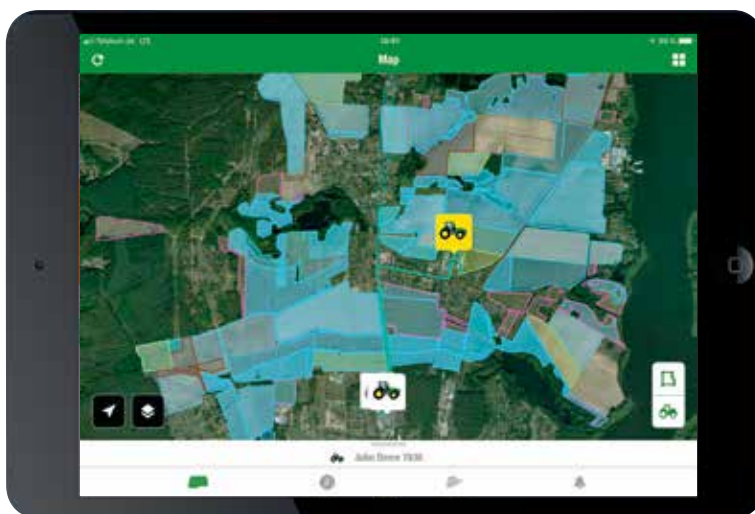
MANAGE YOUR FIELDS THE SMART WAY

The John Deere Operations Center puts your farm in your pocket: Easy-to-understand, integrated tools support your agronomic decision making and help you get maximum yield and consistent quality from your soil at significantly reduced input costs. Plan your crop rotation and tasks for the upcoming season with a structured overview that will make it effortless to create display set-up files and work orders. As the individual tasks are being completed, your documentation data is automatically uploaded from your in-cab display to your personal Operations Center account. From there all operational details are easily visualised on a nicely structured timeline – anytime, anywhere, from any internet-capable device, allowing you to view your mapping or compare different map layers like yield, dry matter, crop constituents, and application rates.

This is how you turn valuable agronomic insights into smart decisions and more easily define corrective actions. Other integrated tools enable you to easily turn this data into site-specific variable rate prescriptions and allow you to collaborate with agronomic advisors by granting them field-specific access rights. Finally, documenting your work for clients becomes simple with easily created, printed and shared reports.

YOUR BENEFIT

- All info in one centralised location, nicely structured and easily accessible
- Gain insights for smart, fact-based decisions
- Leverage numerous additional agronomic tools for further data processing and analysis
- Easy and fast data transfer with Wireless Data Transfer



NEW: MYOPERATIONS APP

All the facts, all the insight,
all the tools: one platform
for better business.



PARTNERING

More connections mean more opportunities. We work great with other systems.



CONNECTED SOFTWARE TOOLS

CONNECT WITH OTHER SOFTWARE AND APPS

+ YOUR BENEFIT

- Collaborate with the partner of your choice
- Customise your Operations Center account with the tools you like most

You need to manage data from many different sources? The John Deere Operations Center offers the technical means for any third-party software or service provider to connect their software solution. Allowing you to customise your personal Operations Center account with the tools you require and to exchange data between systems in a convenient and seamless manner.

A number of third-party companies have already established Application Programming Interfaces (API)s to the John Deere Operations Center. For all the rest, we offer our open developer environment on developer.deere.com.



T3RRA TOOLS

⊕ YOUR BENEFIT

- Leverage your existing investment in John Deere Autotrac
- Minimise earthmoving costs and yield losses

Enhance the capability and efficiency of John Deere iGrade™ with T3RRA Cutta. From in field water management solutions, prescription work flow and creation, to handling a range of 3rd party data sets; T3RRA tools help you analyse, understand and make use of your farming data, while keeping it all in the one place — the John Deere Operations Center.

Water Management — Sometimes it's about managing your most vital input — water. Whether it's scarce or abundant, T3RRA have solutions to control it, and make it work for you. Whether you are irrigated, or rain-fed, there are ways you can improve your landscape to optimise your water use. With our specialised tools connecting effortlessly with John Deere Operations Center and Equipment we make it easy to visualise, design and implement.

Data Management — Do you have a range of data sets that are gathering dust, locked up on USB drives or other programs. With T3RRA Tools, these data sets can now be managed and included in your Operations Center account and usable in field via MyOperations and other connected John Deere apps.

Prescription Management — You may have an existing field prescription you want to adjust and send to a machine or quickly visualise a range of layers to create a prescription. Our Prescription management tools make this easy and provide Rx files for direct use in the Operations Center or via USB.





FLEET MANAGEMENT

IMPROVE EFFICIENCY

If you farm with multiple machines and maybe even in multiple locations, you will appreciate having all recent operational information with you and accessible on mobile devices. On one map you can get a complete overview of your fields and machines, visualise the current GPS position of any of your machines and track the location history. And by setting up geo-fences you can create alerts when your machines move out of certain areas.

At any time, you can look up machine settings, utilisation and performance data remotely and even compare some of the data across machines. If you see any performance optimisation potential, you can quickly establish a Remote Display Access session to assist operators with machine and ISOBUS implement settings.

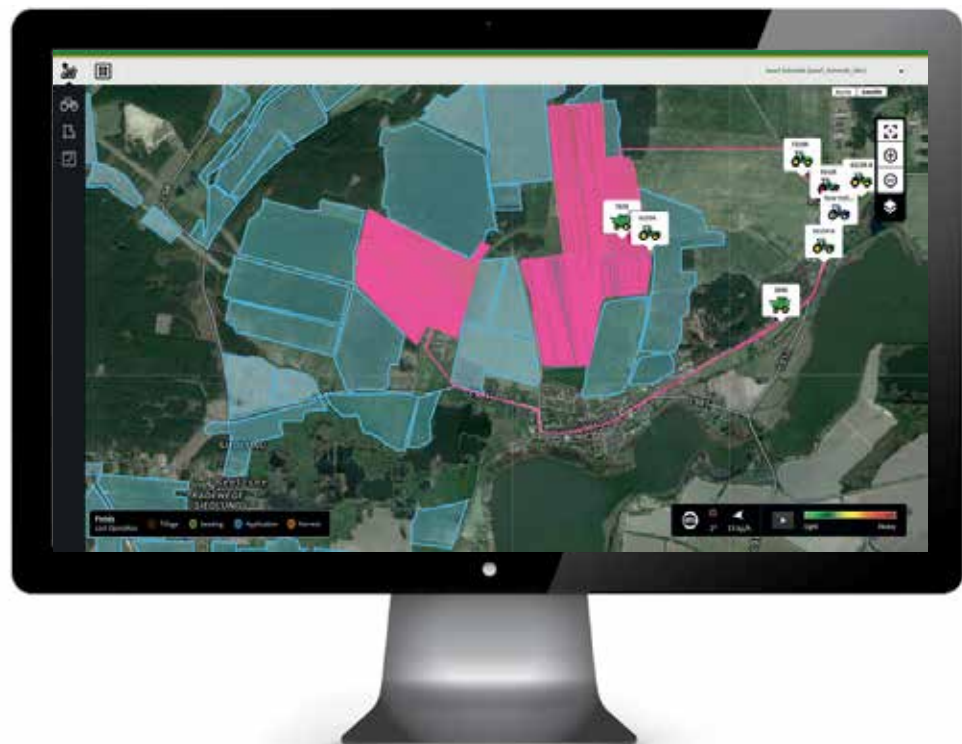
When data is visual, it makes working with it so much easier. You'll enjoy the clarity of views that show coloured fields to let you track whether work has been completed on all fields or if any of them have been missed.

+ YOUR BENEFIT

- Get all your fleet data in one centralised location
- Improve machine operation through location and performance monitoring

ONE GLANCE

Instantly know what's been done and what needs doing. Information is powerful.





+ YOUR BENEFIT

- Plan your jobs efficiently to save time and reduce cost
- Reduce miscommunication and ensure proper job execution
- Minimise stress through reliable information exchange

JOB MANAGEMENT

COORDINATE YOUR TEAM WITH EASE

The John Deere MyJobs App is designed for operators in order to be able to receive clear work instructions from their managers and report back work details to the office. Whether operators are working in – or outside the cab they stay connected to their latest set of work instructions.

By reporting back a detailed job status (Start, Pause, Resume) as well as answering job related questions the need for phone calls is being reduced and an understandable and transparent work documentation is being delivered. Users with an enabled **MyJohnDeere.com** account can receive work instructions, visualised field location & shape, view job details and get directions to the field.

These features ensure the job gets done in the right place, at the right time, with the proper machine settings.



Start every work day with the good feeling that you and your machines are taken care of by a highly experienced John Deere Dealer Technician.



JOHN DEERE CONNECTED SUPPORT™

BENEFIT FROM MAXIMUM UPTIME

In the field the unexpected can happen and when it does you need support fast, even in remote areas. With John Deere Connected Support, you no longer need to fear the unexpected. You can prepare for it and be confident that your dealer will be able to support you and your equipment, when you need it most. Most of our machines now come with five years of connectivity from factory, talk to your local John Deere Dealer today to find out more how Connected Support can benefit your operation today.



YOUR BENEFIT

- More time in the field, more machine uptime
- In case of an issue: faster diagnostics and repair thanks to machine connectivity.
- Detection of certain machine issues even before they might cause collateral damage
- Remote support for machine and implement set-up and optimisation.
- Through the Team Manager in Operations Center you're in full control of what machine data is being shared and can revoke any monitoring permissions at any time.

REMOTE DISPLAY ACCESS

Remote Display Access allows your dealer specialist to connect with your in-cab display and assist with set-up, performance optimisation or troubleshooting of your machine and even ISOBUS implements. No need to wait for an in-field appointment, instead you benefit from immediate help without incurring any extra travel costs.

SERVICE ADVISOR™ REMOTE

With Service ADVISOR Remote your dealer can remotely analyse in real time Diagnostic Trouble Codes (DTC) to isolate potential issues with the connected machine. Once the potential cause of the fault has been identified, your dealer can send the right technician and equipment direct to your machine, equipped with the right parts and tools to complete the repair in the shortest possible time, and when it's convenient for you.

With Remote Programming, certain technical problems which used to leave you with a machine down situation can now be solved remotely via your machines JDLink™ telematics connection. Machine updates can now be pushed to your machine remotely, to resolve problems or enable enhancements.

EXPERT ALERTS

Expert Alerts, our newest unique system advancement, is based on software algorithms that can predict certain upcoming issues before they have a negative impact or cause collateral damage. With diagnostic and repair information being generated automatically, dealer service technicians can react more quickly and downtime can be reduced significantly.

WIRELESS DATA TRANSFER

Wireless data transfer provides seem-less and secure transfer of data through the MyJohnDeere account, without the need for a USB. This provides an efficient way to get data to and from the field, without having to manually collect from each machine.

BEST IN CLASS

Technology driven, powered by dedication – it's the support you deserve.



THE FUTURE IS GREEN

John Deere Precision Ag Technology is one example of our commitment to raising the performance of your operations, maximising uptime and reducing operating costs. Our dealer technicians – all John Deere trained – are familiar with every nut, bolt and byte in your equipment and are skilled at diagnosing any potential problems. After 180 years in the farm equipment business, we can be sure that together we're better.



JOHN DEERE

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