

Trimble Agriculture 2016 Portfolio



Transforming THE WORK OF AGRICULTURE



TRIMBLE AGRICULTURE

Trimble Agriculture addresses challenges at each stage of the crop production cycle with solutions on which you can rely and profit. Trimble solutions cover all seasons, crops, terrains, and farm sizes, and our brand-agnostic strategy allows you to easily deploy the solutions on your equipment—regardless of manufacturer. From land prep to harvest, Trimble solutions will help you maximize your efficiency and lower your costs of doing business.

CONNECTED FARM

Farmers and advisors who use Trimble's Connected Farm™ can monitor real-time information from their office, smartphone, or tablet. Accessing the farm data in a timely manner can improve decision making on crop input usage, fleet utilization, and water applications. The benefits of precision agriculture and Connected Farm extend well beyond the increased efficiency, safety, and profitability of farming operations. The reduced use of fuel, water, chemicals, and other inputs means more food can be produced on less land, with fewer resources and reduced environmental impact.





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	Overview Data Management for the Grower Connected Farm Apps Tools for the Trusted Advisor WATER SOLUTIONS WM-Form™ Land Forming Solution FieldLevel™ Il System WM-Topo™ Survey System WM-Drain® Farm Drainage Solution Irrigate-IQ™ Precision Irrigation Solution RainWave® Precipitation Monitoring Solution Laser Transmitters Grade Control Systems GUIDANCE & STEERING SOLUTIONS Guidance Displays Trimble Ag Developer Network Trimble Ag Developer Network Trimble App Central TMX-2050™ Display & MMX-070 Display FmX® Integrated Display, CFX-750™ Display & EZ-Guide® 250 System Autopilot™, EZ-Steer®, & EZ-Pilot® Steering Systems NextSwath™ Technology TrueTracker™ & TrueGuide™ Systems Correction Services FLOW & APPLICATION CONTROL GreenSeeker® & WeedSeeker® Sensors Field-IQ System HARVEST SOLUTIONS

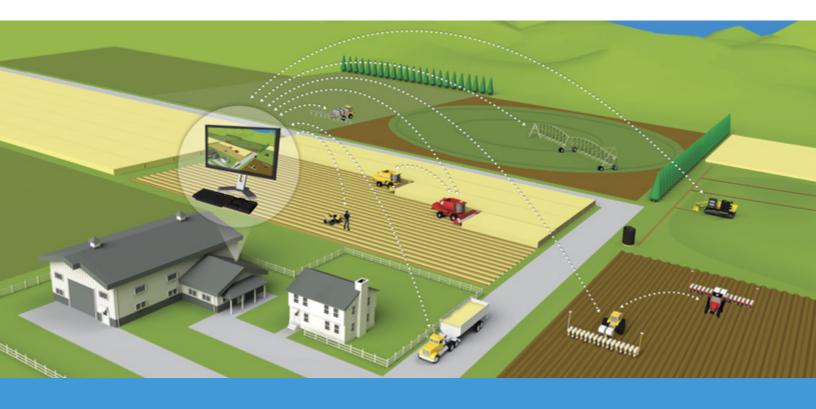


Connected Farm

SOLUTIONS







COLLECT, SHARE, AND MANAGE INFORMATION

Connected Farm™ offers desktop software and web-based solutions that are compatible with all brands of equipment and most data formats so that you can make better decisions with your farm data. To learn more, visit www.connectedfarm.com or call 1-800-225-2848.



COLLECT

Collect data from your in-cab displays, tablets, and smartphones



SHARE

Share data between the field and office, and with trusted advisors



MANAGE

Use your data to analyze productivity and make better farm management decisions



PROTECT

Your data is protected and belongs to you



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DATA MANAGEMENT FOR THE GROWER

ACCESS YOUR FARM DATA ANYWHERE, ANYTIME

Find all vital information in one location such as commodity cash bids and futures prices, weather forecasts, field tasks, fleet locations, and more from a computer, tablet, or smartphone connected to the Internet.





MANAGE PRECISION FARMING MAPS AND FIELD RECORDS

Import precision farming data from a wide range of supported platforms using a USB drive or wireless connection to analyze yield, planting, spraying, or other farming activities. Field tasks can also be recorded manually on your desktop computer or logged with the Connected Farm $^{\mathsf{M}}$ Field app on any smartphone or tablet.

TRACK FARM PROFITABILITY

View the profit and loss for each field and quickly determine what areas of the farm are most profitable. The system synchronizes with Farm Works Software* solutions so that you can dig deeper into your financial data and reports from your desktop computer.





VIEW FLEET POSITIONS AND HEALTH

View real-time fleet positions, engine hours, and current work status such as moving, working, and idling. Access real-time fuel usage, battery voltage, oil pressure, and other valuable engine diagnostics to prevent costly repairs.





DATA MANAGEMENT FOR THE GROWER

TRACK FLEET UTILIZATION

Compare the utilization of each vehicle to better understand which assets are productive during a 24-hour period.





PROCESS IMAGERY

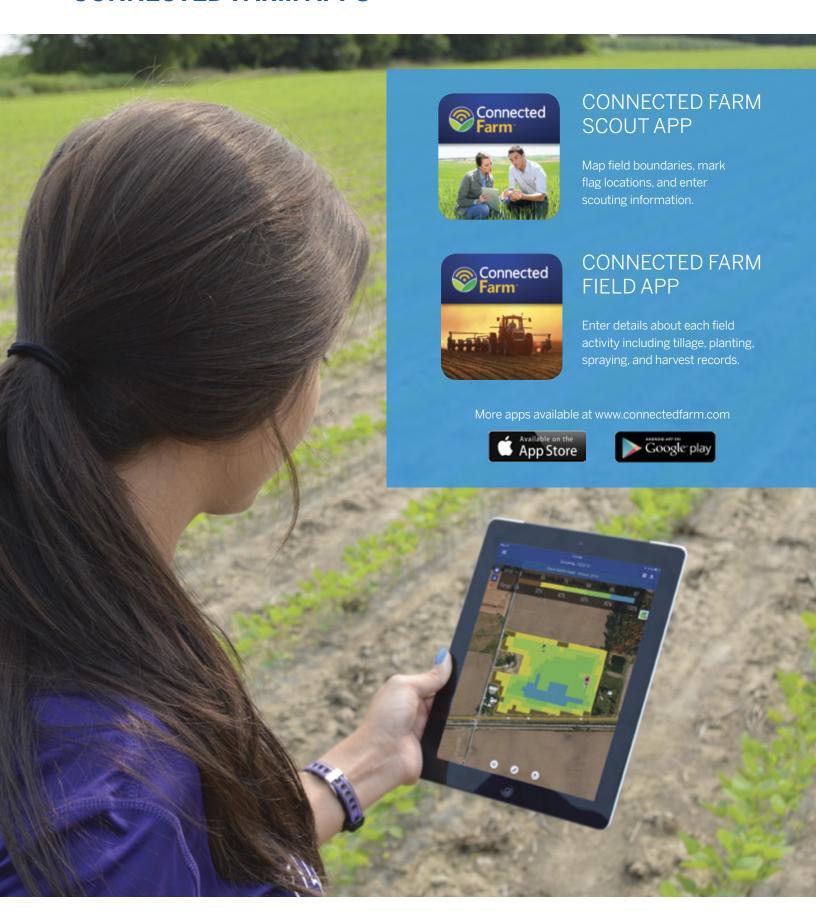
Upload and process imagery including images from Unmanned Aerial Vehicles (UAVs) to create vegetative index maps used for crop management, scouting, and analysis.

SYNCHRONIZE FARM DATA BETWEEN DESKTOP AND WEB

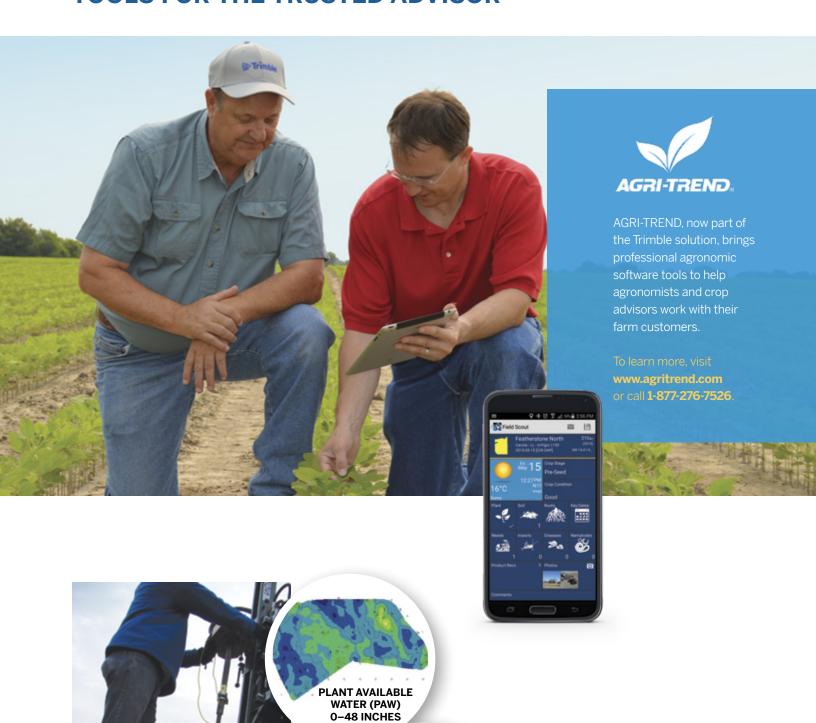
Transfer resources, maps, and other valuable information between Farm Works Software® solutions and the Connected Farm web platform. This enables you to store farming data locally on your desktop computer as well as leverage the web to view data from any location in the world.



CONNECTED FARM APPS



TOOLS FOR THE TRUSTED ADVISOR



COMPACTION

0-48 INCHES

ANALYZE SOIL IN 3D

Use the Soil Information System™ (SIS) solution to assess detailed soil properties such as soil texture, compaction, root zone depth, moisture retention and availability, and soil fertility.







MONITOR IN- SEASON CROP HEALTH

Utilize calibrated PurePixel[™] imagery for comparing crop health from one time period to the next, targeting specific locations for crop scouting. Crop health imagery automatically transfer to the Connected Farm Scout app for locating troubled areas.

CREATE VARIABLE RATE PRESCRIPTION MAPS

Use Connected Farm $^{\text{\tiny{TM}}}$ Advisor to build variable rate prescription maps from grower data and easily share them in a timely manner.



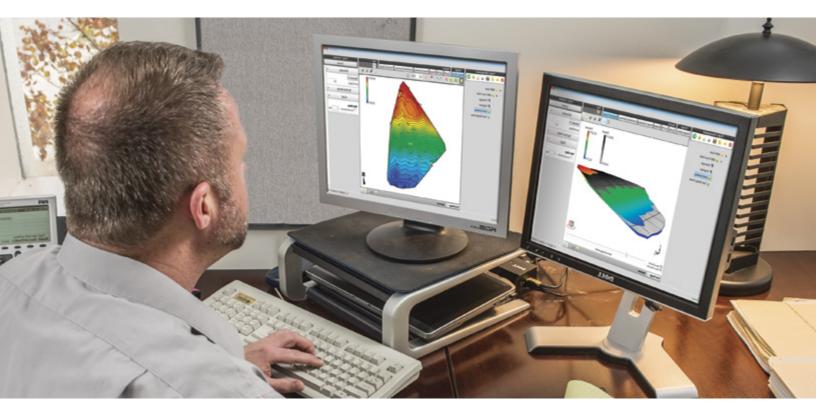


www.connectedfarm.com

Water SOLUTIONS



WM-FORM LAND FORMING SOLUTION



As a complete end-to-end workflow, the Trimble® WM-Form™ land forming solution allows you to perform field survey, analyze topography, create an optimized design, export earthworks reports and control files, and conduct land forming operations on the machine.

With easy-to-use surface design tools and flexible parameters, the WM-Form solution can help you create and implement leveling, surface drainage, and furrow irrigation designs that optimize the field surface for effective water management and produce a more consistent yield.

Flexible Designs

The WM-Form software enables you to design variableshaped fields based on existing topography, the water needs of individual crops, and your own farming practices.

- Level fields with single or multiple planes using a best-fit or custom plane, or with multiple hinges
- Drain water in any direction or to a linear feature such as a ditch or existing drainage system
- Create multi-direction variable slope designs to optimize the surface for furrow irrigation

Leverage your 3D design created in the WM-Form software to form the field using the FieldLevel $^{\text{\tiny M}}$ II system—and improve the performance of your crops.

Benefits

- Open up more acres to be farmed
- Enable optimal water distribution and drainage
- Minimize disturbance of valuable topsoil
- Reduce erosion and minimize flooding by effectively channeling water in the right direction
- Create more uniform production and increase yield
- Minimize the amount of earthworks and reduce land forming time and costs



FIELDLEVEL II SYSTEM

The FieldLevel™ II system utilizes lessons learned from more than 30+ years of industry leadership in high-precision GNSS applications and land leveling. The FieldLevel II system streamlines the survey, design, and grading steps required for land leveling and land forming.

LAND LEVELING

Survey

Map your fields with RTK measurements and create boundaries, interior points, and sections.

Design

Use WM-Form™ software to optimize land leveling designs or create a best-fit surface using Autoplane technology.

Level

Level your field using any tractor and scraper, including tandem and dual scraper systems, while driving the scraper hydraulic valves automatically.

LEVEE DESIGN & INSTALLATION

Survey

Capture 3D topographic data using the TMX-2050[™] or FmX[®] displays, or with the WM-Topo[™] system.

Design

Use WM-Form software to analyze and design planar and variable-grade land forming designs.

Install

Utilize a Trimble steering system to guide the tractor as the levees are being installed.



Benefits

- ► Efficiently distribute water by maintaining grade
- Improve yields by controlling excess water
- Minimize water costs and improve farm productivity

WM-TOPO SURVEY SYSTEM

The WM-Topo survey system is a portable topographic data collector that can be taken into areas inaccessible to tractoror truck-mounted survey equipment. Collect survey data by hand when poor field conditions exist, or crops are too mature to allow vehicle access.

Survey data can then be transferred to Farm Works™ Surface software or directly to select Trimble® displays, and used to create surface models as a basis for better-informed water management decisions.

For use during land forming and leveling projects

Follow along behind a scraper performing grade checks with the WM-Topo system. This portable system allows you to check your land forming or leveling project's accuracy as you go.

Topographic data gathered with the WM-Topo system can also be used on the TMX-2050 or FmX displays to create land forming or leveling designs for use with the FieldLevel II system for water management.

WM-DRAIN FARM DRAINAGE SOLUTION

Trimble's WM-Drain® farm drainage solution connects the survey, analysis, design, installation, and mapping steps in your surface and subsurface drainage projects.

When combined with select Trimble displays and RTK-level corrections, the WM-Drain solution ensures optimal 3D tile placement, which improves crop yields by controlling surface ponding, optimizing root depth, maximizing the planting season, and minimizing nutrient loss.

Survey

Collect 3D field data with ease by using the TMX-2050 or FmX displays or WM-Topo survey system.

Analyze

Analyze the 3D field data using Farm Works Surface software to make better-informed drainage decisions.

Design

Design and verify a complete 3D drainage system using Farm Works Surface software in the office, or design drainage lines on-the-go without having to leave your vehicle.

Install

Take your designs back to the field and utilize Trimble's 3D machine control technology for precise installation of your pipe or surface ditches.

Mapping

Map the true location of your installed drainage pipes or ditches and utilize the records for future maintenance or drainage expansion projects.



Benefits

- ► Improve crop yields up to 30%
- Maintain a more developed root zone for better nutrient absorption
- Remove excess water from the field and lower plant stress
- Reduce field compaction and minimize soil erosion

For use during drainage projects

Gather topographic field data using the WM-Topo system, then transfer that data to Farm Works Surface software or the TMX-2050 or FmX displays to create a 3D model of the field.

Take the WM-Topo system back out to the field to flag locations where drainage tile should be installed, then utilize the WM-Drain solution to complete the drainage job.





IRRIGATE-IQ PRECISION IRRIGATION SOLUTION



Every irrigation situation is different from field to field, and grower to grower—whether it is monitoring and controlling all your pivots from any location, or targeting applications in specific areas across your field. You want your irrigation system to help get the water to the crop and maximize your yields. That's where the Irrigate-IQ $^{\text{M}}$ precision irrigation solution comes in.

The Irrigate-IQ solution is flexible and scalable to suit your irrigation needs. You can start with the basic system to remotely monitor and control pivots, and upgrade to either optimal flow or variable rate irrigation at any time, using the same base hardware. There is no loss of initial investment!

Benefits

- Improve crop quality and yield
- Optimize water resources and water use efficiency
- Minimize input costs of water, fertigation, or effluent
- Reduce energy costs for fuel and electricity
- Ensure even application to reduce run-off and leaching
- Reduce trips to the field



IRRIGATE-IQ MONITOR AND CONTROL

Monitor and control your irrigation system from any computer, smart phone, or tablet—so you don't have to waste time going out to the field.

- Use any device to remotely monitor and control your irrigation systems
- Utilize the system on mixed fleets and view status information all in one place
- Receive text alerts about pivot status to provide confidence it is operating as expected
- Easily upgrade to variable rate irrigation or optimal flow as needs require



IRRIGATE-IQ OPTIMAL FLOW

Incorporate no spray areas within your irrigation plan, even if you do not have a variable frequency drive irrigation pump, while keeping the pressure regulated across the pivot.

- ▶ Employ no spray areas to focus water resources on areas that need it
- Ensure pressure and flow rate are within optimal, safe ranges
- Reduce the risk of damaging equipment due to significant pressure changes
- Utilize standard pump equipment that you already own



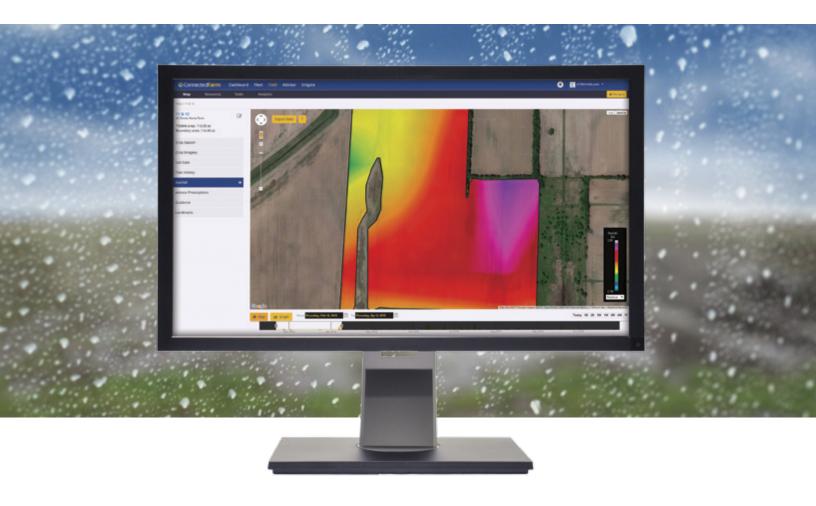
IRRIGATE-IQ VARIABLE RATE IRRIGATION

Perform highly targeted application of water, fertigation, or effluent by varying the rate of application across your pivot.

- Create VRI plans that compensate for variations across the field
- ▶ Manage exclusion zones to ensure water is not being wasted in areas that don't need it
- Control individual nozzles to apply the right depth in the right spot
- Meet environmental regulations by controlling and reporting on where and how much you irrigate



RAINWAVE PRECIPITATION MONITORING SOLUTION



The RainWave® precipitation monitoring solution provides you with vital rainfall data, allowing you to make better management decisions for irrigation planning, fleet management, and timing of material application for nutrient and pest management.

Virtual Rain Gauge

Set up a virtual rain gauge for a specific site to view and monitor rainfall reports, so you can save time traveling to dispersed gauges or manually tracking precipitation.

Rainfall Graph

View site-specific rainfall activity in 10-minute increments plus accumulated rainfall over a 24-hour period so you can have a better understanding of rainfall intensity.

Contour Map

Access the color-coded rainfall contour maps and see rainfall variations within an entire farm or across fields, so you can know exactly how much it rained and where.

Benefits

- Understand how much water ran off the field and how much was absorbed into the soil based on intensity reporting
- Optimize irrigation plans with latest rainfall map
- Eliminate physical rain gauge reading errors and maintenance
- Make informed decisions on resource deployment
- Reduce trips to the field

LASER TRANSMITTERS

Trimble offers an entire line of Spectra Precision® laser transmitters that can be used to manually perform a variety of water management tasks and ensure that the water on your field is distributed evenly.

SPECTRA PRECISION LASER GL700 SERIES

A self-leveling, advanced laser transmitter series ideal for applications requiring a high level of accuracy, beam stability, and the capability to set single or dual slopes.

SPECTRA PRECISION LASER GL600 SERIES

A highly reliable laser transmitter series, ideal for users requiring the ability to set single or dual slopes in their fields.

SPECTRA PRECISION LASER AG401

An entry-level, self-leveling laser transmitter, ideal for operations on zero-grade fields that do not require grade adjustments.



GRADE CONTROL SYSTEMS

By adding automated grade control systems to your leveling or drainage equipment, you can improve your productivity and accuracy by up to 50%.

AG GCS300/400 GRADE CONTROL SYSTEM

Advanced grade control systems that offer multiple capabilities to growers or water management contractors. They can be used for any application offering control, survey, and indicate modes.

AG GCS200 GRADE CONTROL SYSTEM

A mid-level grade control system that includes a digital elevation display and can be used in both control and survey modes.

AG GCS100 GRADE CONTROL SYSTEM

An economical grade control system delivering excellent performance in long range applications with adverse environmental conditions.





Guidance & Steering

SOLUTIONS















TMX-2050 DISPLAY

FmX INTEGRATED DISPLAY

CFX-750 DISPLAY

MMX-070 DISPLAY

EZ-GUIDE 250 SYSTEM

Trimble guidance displays help you accurately monitor and map field information in real time. Benefit from industry-leading performance and reliability to complete field applications quickly and efficiently. With an array of functionalities and price points, you can select a display option that best fits your farming needs.

Features	TMX-2050™ display	FmX° display	CFX-750™ display	MMX-070 display	EZ-Guide® 250 system
Size of screen	12.1" (30.8 cm)	12.1" (30.8 cm)	8.0" (20.3 cm)	7.0" (17.8 cm)	4.3" (10.9 cm)
Touchscreen	٧	V	V	V	
Video camera inputs	1	4	2		
Built-in GPS receiver	1	2	1	Select capabilities	1
GLONASS compatibility	V	V	V	Optional	
Assisted steering compatibility	V	V	V		V
Automated steering compatibility	V	V	V		
Implement control	V	V			
NextSwath™ end-of-row turn technology	V				
Row guidance	V	V			
Flow and application control	Select capabilities	Select capabilities	Select capabilities		
ISOBUS / TUVR support	V	V		V	
On-the-go VRA with GreenSeeker* sensors	V	V			
Water management	V	V			
Yield monitoring	٧	٧	Select capabilities		
Wireless vehicle to vehicle data exchange	V	V			
Trimble App Central	V			V	
Internet browsing capability	٧			V	



TRIMBLE AG DEVELOPER NETWORK

The Ag Developer Network reflects Trimble's commitment to providing customers with a comprehensive suite of brandagnostic farm management tools for coordinating field activities, managing disparate farm data, and making informed, real-time decisions.

The Ag Developer Network enables third-party software companies to develop Android™ applications for the Trimble® TMX-2050™ display and the MMX-070 display. Developers can integrate with the Connected Farm™ web-based management solution to access data on in-cab displays, desktop software, and cloud storage.

IN-CAB DISPLAY APPLICATIONS

The Ag Developer Network enables developers to collaborate with Trimble to create Android-based applications that address more specialized precision farming challenges. Third-party mobile applications are available for download from App Central marketplace on the TMX-2050 display and MMX-070 display.



CONNECTED FARM INTEGRATION

Customers and developers are able to engage with Connected Farm Application Program Interfaces (APIs). Third-party developers can use the APIs to send data files between their applications and Connected Farm including prescription files, as-applied maps, boundaries, and other precision farming data.



CHOICE OF CONFIGURATIONS AND DISPLAY SOFTWARE

and price point:



TMV 2050 display with the Precision IO and

The Trimble $^{\circ}$ Precision-IQ $^{\circ}$ app provides a graphics-rich and streamlined workflow designed specially for today's leading grower. Implement the latest platform for connectivity with auto-guidance, and standardized protocols including ISO and Trimble TUVR for variable rate applications.

Choose the configuration and display software that meets your specific needs



TMX-2050 display with the Precision-IO and FmX Plus apps

Increase your functionality with the additional feature set available in FmX* Plus, including implement steering, end-of-row turns, water management, and yield monitoring. Leverage the same familiar workflows and menus of the Trimble FmX integrated display with the advantage of faster processing and connectivity—without the need to retrain or learn new software.

TRIMBLE APP CENTRAL





App Central provides farmers with enhanced flexibility to install apps, view descriptions and images, report issues, connect with developer partners, and stay current with on-demand updates. Users can access the apps most useful to their farm operation, language, and regional compliance requirements.

App Central provides a safe environment to distribute applications that have been Trimble tested and approved to make sure they don't interfere with core precision farming applications and operations.

All applications are available for download from App Central marketplace on the TMX-2050 display and MMX-070 display. To learn more about app availability, visit: http://agdeveloper.trimble.com/app-central.



Connected



FLEET



IRRIGATE





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COPILOT



FIELD

Trimble.

TMX-2050 DISPLAY



In the middle of a busy season, the last thing you need is a complicated interface. The easy-to-use TMX-2050 $^{\text{TM}}$ display features a large high-definition touch screen with sharp visuals and a choice of FmX $^{\text{e}}$ Plus or Precision-IQ $^{\text{TM}}$ display applications to suit your specific farm practices.

Display Specifications

- ► 12.1" (30.8 cm) high-definition color touchscreen display
- Choice of configurations with Precision-IQ and FmX Plus display applications
- ► Android[™] platform ready for future development
- One integrated GNSS receiver
- ▶ 32 GB of storage
- ▶ Weight: 5.5 lbs (2.5 kg)
- ► Easily transfers between vehicles

MMX-070 DISPLAY



The MMX-070 display is a robust, portable, Android tablet built for agriculture. It combines the capabilities of a precision farming display with the advantages of a tablet. Use it in the cab for manual guidance and automatic section control over ISOBUS, as well as outside the cab for mapping, scouting, or other tasks.

Display Specifications

- ▶ 7" (17.8 cm) color touchscreen display
- Android platform ready for future development
- ▶ 16 GB of storage, Micro SD expandable
- ► Weight: 1.2 lbs (550 g)
- ► Built-in WiFi and Bluetooth
- ► Easily transfers between vehicles and outside the cab for mapping and scouting tasks
- Not available in all regions

FmX INTEGRATED DISPLAY



The FmX integrated display is an advanced, full featured guidance display for all your precision farming operations. This versatile display allows you to adapt as your farming business grows. It provides leading-edge capabilities that help you enhance your productivity in any stage of the crop cycle—season to season, year after year.

CFX-750 DISPLAY

The CFX-750™ display is an affordable, multi-function guidance display offering key precision agriculture functionality. This intuitive display allows you to easily perform day-to-day farming tasks, extend your operating hours, and enhance productivity on your farm.

NEW! The CFX-750 Lite display provides a lower price point and a simplified interface for farmers who need fewer precision farming capabilities. As needs change in the future, the Lite display can easily be upgraded to match the same feature set as the CFX-750 display



EZ-GUIDE 250 SYSTEM



The EZ-Guide® 250 system is an entry-level display providing high-quality guidance capabilities at an entry-level price. It is ideal for farmers who desire basic precision agriculture functionality for fields that require lower-accuracy corrections.



AUTOPILOT AUTOMATED STEERING SYSTEM



The Autopilot™ automated steering system provides integrated, high-accuracy steering in any field type—hands free. When your vehicle is off line, the Autopilot system signals it to adjust its position to follow the correct path.

NEW! The Autopilot Motor Drive system simplifies installation when using the SAM-200 electric motor instead of full hydraulic installation. Installing this system can take 40% less time when compared to an aftermarket hydraulic autosteering system.

EZ-PILOT ASSISTED STEERING SYSTEM

The EZ-Pilot® assisted steering system provides high-accuracy steering at an affordable price. When you are driving your vehicle, the EZ-Pilot system turns the wheel for you with a compact electric motor drive using guidance from Trimble® displays to help keep you on line and improve your efficiency.



EZ-STEER ASSISTED STEERING SYSTEM



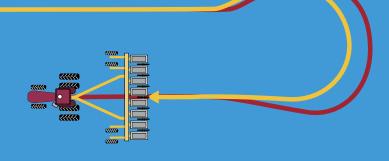
The EZ-Steer® assisted steering system provides simple, portable, hands-free farming for more than 1200 vehicle models—old and new. It helps keep your vehicle on line for efficient, low-stress steering capabilities for your farming applications.

NEXTSWATH TECHNOLOGY

NextSwath™ end-of-row turn technology automatically calculates and executes the best possible path to turn around a vehicle and approach the next crop row with the implement precisely aligned to begin working. Improved turning efficiency and repeatability can increase yield while also saving time and fuel costs, and preventing crop damage.

- Available on the TMX-2050™ display with the FmX® Plus application and Autopilot automated steering system
- Dramatically improve the operator's performance
- Eliminate towed implement undershooting or overshooting
- Minimize skips and overlaps when lining up for the next row

NEW! The "stay within boundary" feature makes it easier to manage the turn of the vehicle and implement to the very edge of the field—even for complex-shaped fields and boundaries.





TRUETRACKER & TRUEGUIDE STEERING SYSTEMS



The TrueTracker[™] implement steering system is an active implement guidance system that keeps your tractor and implement on the same guidance line.

 Provides high-accuracy control on difficult terrain with terrain compensation technology on the implement

The TrueGuide™ implement guidance system is a passive implement guidance system that monitors and corrects the position of your implement by moving the tractor.

 Low-cost solution best suited for broadacre farming applications



CORRECTION SERVICES

Trimble has been the leader in the GPS industry for over 30 years. Our correction services are second-to-none, and are the backbone of every precision agriculture solution we offer. Substantial increases in yield can be achieved by using any level of correction, from sub-meter to sub-inch. No matter where you are located or the size of your operation, Trimble has a correction service solution for your farm.

- Range of correction services to meet all your precision agriculture needs based on crop, terrain and location
- ▶ Save time, fuel and money and increase output
- Receive accurate, high-performance positioning no matter where you are located

RTK-BASED TECHNOLOGY

CENTERPOINT RTK

Accuracy Initialization/Convergence

<1" (2.5 cm) <1 min



Receive the highest accuracy correction service within 8 miles (12.87 km) of an established RTK base station or base station network. Add a Trimble® RTK base station as part of a network or as a single mobile base station for on-farm use.

CENTERPOINT VRS™

Accuracy

Initialization/Convergence

<1" (2.5 cm)

Instant



- ► Instant access to real time kinematic (RTK) corrections
- Centimeter-level RTK accuracy
- ► Built-in redundancy
- No single base station required



XFILL IS INCLUDED WITH ALL RTK-BASED TECHNOLOGY!

- Increase your uptime by receiving supplemental Trimble xFill™ signals when an RTK or VRS signal is lost
- Up to 20 minutes of extended RTK operation keeps user in the field longer with fewer interruptions



TRIMBLE RTX-BASED CORRECTION SERVICES

Trimble RTX™ delivers GNSS enabled correction services to your receiver worldwide. Trimble CenterPoint® RTX and RangePoint™ RTX correction services provide:

- Unmatched reliability and uptime
- ► Free GLONASS unlock with active subscription
- No base station needed
- Service over a large geographic area
- Available on the TMX-2050[™] display, FmX[®] integrated display, CFX-750[™] display, and AG-372 GNSS receiver



CENTERPOINT RTX

Repeatable Accuracy

< 1.5" (< 4.0 cm)

Initialization

Standard (30 min)*



Fast (< 5 min)**









RANGEPOINT RTX

Pass-to-Pass Accuracy

< 6" (15 cm)

Repeatable Accuracy

< 20" (50 cm)

Initialization

1-5 minutes





^{*} Receiver initialization time varies based on GNSS constellation health, level of multipath, and proximity to obstructions such as large trees and buildings. In ideal conditions, receivers can converge to a 30 cm position in approximately 10 minutes, 20 cm in 15 minutes, and full accuracy in less than 30 minutes.

All horizontal accuracy specifications are based on repeatable in-field performance 95% of the time.



^{**} CenterPoint RTX Fast is currently available via satellite in a central swath of North America and throughout much Western and Central Europe. In Europe it is available on the CFX-750 display, TMX-2050 display and AG-372 GNSS receiver. In North America the Trimble FmX display is also compatible with CenterPoint RTX Fast

Flow & Application

CONTROL



GREENSEEKER CROP SENSING SYSTEM

The GreenSeeker® crop sensing system is a variable rate application and crop vigor mapping system that offers a more efficient and precise way to manage crop inputs such as nitrogen.

- ► The GreenSeeker system can be used to verify the amount of nitrogen the soil has made available, then determines a nitrogen prescription on-the-go for instant application
- ▶ The correct amount of fertilizer is delivered in real time



GREENSEEKER HANDHELD CROP SENSOR

The GreenSeeker handheld crop sensor is an affordable, easy-to-use measurement device that can be used to assess the health—or vigor—of a crop.

- Readings taken by the GreenSeeker handheld can be used to make non-subjective decisions regarding the amount of fertilizer to be applied to a crop
- Use the Connected Farm Scout app on a smartphone or tablet to calculate fertilizer application rates from crop readings taken with the GreenSeeker handheld



WEEDSEEKER AUTOMATIC SPOT SPRAY SYSTEM

The WeedSeeker* system helps you cut overall weed control costs by up to 80% by saving on chemical costs, cutting down on time and labor, and reducing the environmental impact of your field activities.

- Uses advanced optics and computer circuitry to sense if a weed is present
- ► When a weed enters the sensor's field of view, it signals a spray nozzle to deliver a precise amount of herbicide
- ► The WeedSeeker system will spray only weeds, not bare ground, and is effective wherever weeds occur intermittently





FIELD-IQ CROP INPUT CONTROL SYSTEM



Trimble's Field- IQ^{m} crop input control system is a section control and variable rate application control system that prevents seed and fertilizer overlap, controls the rate of material applications, monitors seed delivery or fertilizer blockage, and controls the height of spray booms. The Field-IQ system runs on the TMX-2050 $^{\text{m}}$ display, FmX $^{\text{m}}$ integrated display, and CFX-750 $^{\text{m}}$ display. Each of these displays supports a different combination of Field-IQ functionality—giving you the ability to choose the interface option that fits your needs.

VARIABLE RATE APPLICATION CONTROL

- Simultaneously control the application rate of up to six different materials when using the TMX-2050 display or FmX integrated display, including seed, granular seed, granular fertilizer, liquid, and anhydrous ammonia in different combinations
- ► Two material rate control capability when using the CFX-750 display, and single material rate control when using the TMX-2050 display for spraying
- Variable rate control of materials can be achieved with a prescription VRA map or in real time with a GreenSeeker® system for more efficient fertilizer utilization

- As-applied mapping records where you've applied inputs and automates record keeping
- Adjust your seed population, fertilizer rates, or spray application manually or automatically using a prescription created with Farm Works Software® (desktop) solutions or Connected Farm™ Advisor (web) solutions
- Automatically control spinner speed of spreader application systems to evenly distribute nutrients

RAWSON® DRIVE

- Drives piston pumps for more efficient operation during planting
- ► Single drive can run up to 24 row units
- Mounts to a number of planting, drilling, air seeding, piston pumps, and strip till applicators

TRU COUNT AIR CLUTCH®

 Use for automatic section control to eliminate seed overlap in your headlands and point rows

TRU COUNT LIQUIBLOCK™ VALVE

Use for automatic section control to eliminate liquid fertilizer overlap



AUTOMATIC SECTION CONTROL

- Manage seed, liquid, and anhydrous using section control on up to 48 individual sections
- Overlap detection shows where you've been and what you've done

BOOM HEIGHT CONTROL FOR SPRAYERS

- Automatically adjust spray boom height with ultrasonic sensors that measure the distance between ground or crop canopy, resulting in an even application of material
- Minimize environmental impact and ensure the health of neighboring crops by eliminating off-target applications of products
- Compatible with the CFX-750 display

SEED MONITORING

- Advanced seed monitoring increases the quality of seed placement by delivering singulation details from the seeding system to the operator, allowing for on-the-go planter tuning
- Prevent costly planter problems by catching them early before they cause yield reduction
- See results of singulation analysis including information on population, singulation, skips/multiples, spacing, and quality of spacing





Harvest SOLUTIONS



RG-100 ROW GUIDANCE SYSTEM

The RG-100 row guidance system allows you to automatically adjust the combine in response to changes in the rows by using existing sensors built into the combine head. The RG-100 system uses the Autopilot™ automated steering system and TMX-2050™ display or FmX® integrated display to center the combine on rows—even when they are not straight.

- Reduce fatigue in difficult conditions such as down corn, curved rows, long passes, and other poor visibility conditions
- Operate effectively in fields planted using other steering systems or in areas where the planter drifted
- Stay on line to efficiently gather ears of corn—and ultimately increase your yield
- RG-100 row guidance works with advanced T3™ terrain compensation technology in the Autopilot system for high-accuracy steering on rolling hills and slopes



YIELD MONITORING

With Yield Monitoring, you can accurately collect yield and moisture data for a variety of grain crops. This information is critical for precision agriculture operations—allowing you to perform valuable analyses to enhance your decision making on your farm, season to season.

- Map and compare the performance of different seed varieties throughout your field
- Improve seed selection based on yield data over multiple years
- Adjust the cut width automatically when traveling over odd-shaped fields, point rows, or other previously harvested areas to avoid inaccurate yield calculations
- Transfer yield data to your office using a USB stick or wirelessly with Connected Farm to analyze how seed varieties compared to yield
- Utilize your yield data to create variable rate prescription maps and send them wirelessly from the office to the field using Connected Farm





About Trimble's Agriculture Division

Trimble Agriculture solutions enable you to maximize efficiency and reduce chemical and fertilizer inputs while also protecting natural resources and the environment. Trimble's precision agriculture solutions cover all seasons, crops, terrains, and farm sizes, and its brand-agnostic strategy allows you to use Trimble products on most vehicles in your fleet—regardless of manufacturer. To enable better decision making, Trimble offers the Connected Farm™ solution which allows you to collect, share, and manage information across your farm in real time. To optimize water use, Trimble provides water solutions for irrigation, drainage, and land leveling. Trimble's product suite includes vehicle and implement guidance and steering, as well as a portfolio of correction options that are the most versatile of their kind in the industry. Additional solutions include an unmanned aircraft system (UAS) for aerial imaging and mapping; agri-services; application control for seed, liquid, and granular products; a harvest solution; and

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