

Trimble Agriculture Portfolio



Table of Contents



Trimble's innovative, user-friendly precision ag technology solutions help farmers connect their entire operation so they can make data-driven decisions in real time that drive productivity, profitability, and sustainability.

The Trimble Agriculture suite of precision solutions unifies all aspects of modern farm management. From the office to the field, all year round, Trimble helps growers complete farm work smarter, faster, and more efficiently. Through universal vehicle and implement integration, seamless data transfer and analysis, and the best correction services available, farmers can unite as much or as little of their operation as they choose, with easy options for expanding and upgrading as desired.

Our solutions are delivered through a global reseller network which includes our premier Vantage™ distributors and knowledgeable Trimble® Authorised resellers—technology specialists who provide precision agriculture hardware, software, and data expertise for the entire farm.

Introduction	3
Display/TeamViewer Quick Support	4-5
Guidance and Steering	6-7
Steering Comparison	8
Display Comparison	9
Flow and Application Control	10
Field-IQ ISOBUS Control Solutions	11
WeedSeeker 2 Spot Spray System	12
NextSwath 2 End-of-row Turn Technology	13
Correction Services	14-15
Water Management	16
WM-Survey II	17
Workflow and Data Management	18
Trimble Select	19
Global Reseller Network	20

Displays

Trimble guidance displays help you accurately monitor and map field information in real time. Benefit from their 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.



TMX-2050™ Display

Best suited for complex farming operations that run large implements, need multi-product applications, or require water management capabilities such as grading, levelling and/or tiling.

- ▶ 30.5 cm high-definition colour touchscreen display to control up to 6 materials and section control on implements
- ▶ Android™-based operating system
- ▶ Control up to 256 sections with ISO and 6 products with Trimble Field-IQ™ crop input control system
- ▶ Customisable run screen
- ▶ Supports multiple receivers required to perform water management work or implement guidance
- ▶ 1 integrated camera with support for 2 additional external cameras
- ▶ Easy transferability between vehicles
- ▶ Trimble RTX® correction services compatible



GFX-750™ Display

Best for mainstream farming practices and farmers with moderate precision ag adoption, who need a range of accuracy options, and simple spraying and spreading control. Offers easy-to-use, modern touchscreen and compatibility for any ISOBUS-ready tool.

- ▶ Large 25.4 cm high-definition colour touchscreen display
- ▶ Android-based operating system
- ▶ Control up to 256 sections with ISO and 4 products with Trimble Field-IQ crop input control system
- ▶ Roof-mounted combination NAV-900 guidance controller and receiver
- ▶ Also compatible with the NAV-500™ guidance controller
- ▶ Customisable run screen
- ▶ 1 integrated camera with support for an additional external camera
- ▶ Easy transferability between vehicles due to reduced in-cab cabling
- ▶ Trimble RTX correction services compatible

GFX-350™ Display

The latest Android-based, easy-to-use display from Trimble Agriculture is cost-effective and offers great functionality with a simplified installation process, providing access to autosteering and application control for every farm. Add in Bluetooth® and Wi-Fi® connectivity to go along with ISOBUS compatibility, and any grower can tackle farming applications from every season across all equipment brands.

- ▶ 17.8 cm high-definition colour touchscreen display
- ▶ Android-based operating system
- ▶ Rugged construction for everyday field use
- ▶ Trimble RTX correction services compatible
- ▶ Compatible with the AV-500 and NAV-900 guidance controllers
- ▶ ISOBUS task controller and universal terminal
- ▶ Control up to 2 channels and 24 sections



TeamViewer QuickSupport with Remote Control

The GFX-750 and GFX-350 displays now support full remote control with TeamViewer QuickSupport. Resellers can now see and control connected displays from their office to solve farmer problems in the field.

TeamViewer QuickSupport functionality has been updated on the Trimble® GFX-350 and GFX-750 displays to allow complete remote control of a display. This means that a TeamViewer QuickSupport user (typically a Vantage™ distribution partner or Authorised Trimble reseller) can control operation of the display from a remote location using the QuickSupport app and TeamViewer software. File Transfer functionality is available too, as it is currently with view-only versions of TeamViewer.



Please note: This version of TeamViewer is not supported on the TMX-2050™ display or any display using the Android 4.0 Operating System. Android OS 5.0 or newer is required.

Guidance and Steering



Autopilot™ Automated Steering System

- ▶ Automated, hands-free guidance
- ▶ Installs directly into hydraulic system
- ▶ Delivers highest-accuracy steering in any field type



Autopilot™ Motor Drive System

- ▶ Simplifies installation when using an electric motor instead of full hydraulic installation
- ▶ Installs in 40% less time than an aftermarket hydraulic autosteering system



EZ-Steer® Assisted Steering System

- ▶ Provides simple, portable, hands-free farming for more than 1200 vehicle models—old and new
- ▶ Efficient, low-stress steering option



EZ-Pilot® Assisted Steering System

- ▶ Provides high-accuracy steering at an affordable price
- ▶ Turns the wheel for you with a compact electric motor drive mounted directly to the steering column



EZ-Pilot Pro™ Assisted Steering System

- ▶ Offers high accuracy guidance across mechanical front-wheel drive tractors, 4WDs, and combines
- ▶ Enables vehicles to be engaged in reverse to allow them to be lined up for the next pass (max. 15 seconds)



NAV-900 Guidance Controller

- ▶ Triple-frequency multi-constellation GNSS receiver
- ▶ Enables higher reliability and shorter convergence time
- ▶ Compatible with full suite of automated steering solutions
- ▶ Trimble RTX correction services compatible



NAV-500™ Guidance Controller

- ▶ Pair with any GFX series display for an affordable precision solution
- ▶ Compatible with assisted steering solutions only
- ▶ Sub-meter repeatable accuracy
- ▶ Trimble RTX correction services compatible



TrueTracker™ Implement Steering System

- ▶ Keeps your tractor and implement on the same guidance line
- ▶ Provides high-accuracy control on difficult terrain by actively steering the implement



TrueGuide™ Implement Guidance System

- ▶ Corrects the position of your implement by moving the tractor
- ▶ A low-cost solution best suited for cereal crops








RG-100 Row Guidance System

- ▶ Allows you to automatically adjust the path of the harvester by using existing sensors built into the combine or forage harvester head
- ▶ Centres the harvester on rows—even when they are not straight

Steering Comparison

Display Comparison

Features	Autopilot automated steering system	Autopilot Motor Drive system	EZ-Pilot Pro assisted steering system	EZ-Pilot assisted steering system	EZ-Steer assisted steering system
					
TMX-2050 display	✓	✓		✓	✓
GFX-750 display system	✓ **	✓ **	✓	✓	✓
GFX-350 display	✓ **	✓ **	✓	✓	✓
Guidance-ready vehicles	✓	✓			
TrueTracker implement steering system	✓	✓			
TrueGuide implement guidance system	✓	✓			
RG-100 row guidance	✓	✓			
T2* terrain compensation for roll and yaw					✓
T3™ terrain compensation for roll and yaw	✓	✓	✓	✓	
** When paired with the NAV-900 guidance controller					

Features	TMX-2050 display	GFX-750 display	GFX-350 display
			
Size of screen	30.5 cm	25.4 cm	17.8 cm
Touchscreen	✓	✓	✓
Bluetooth		✓	✓
Video camera inputs	2	1	1
Includes GNSS receiver	✓		
GLONASS compatibility	✓	✓	✓
Assisted steering compatibility	✓	✓	✓
Automated steering compatibility	✓	✓	✓
NextSwath end-of-row turn technology	✓	✓	
Row guidance	✓		
Flow and application control	Max. of 6	Max. of 4	Max. of 2
ISOBUS UT/TC	✓	✓	✓
TUVR	✓	✓	✓
Implement steering	✓		
Water management	✓		
Yield monitoring	✓		
Trimble Ag App Central	✓	✓	✓
Internet browsing capability	✓	✓	✓



Get up to 10% input savings using Trimble guidance and steering solutions

Flow and Application Control

From flow/seed control valves and spot spray products to a full solution that performs variable rate application and automatic section control, Trimble flow and application control systems can help you increase yields and save on input costs for seed, granular fertiliser, liquid, or anhydrous ammonia.



Automatic Section Control

- ▶ Manages seed, liquid, and anhydrous using section control on up to 48 individual sections
- ▶ Eliminates overlap by automatically turning off sections that have already been covered

Variable Rate Application Control

- ▶ Simultaneously controls the application rate of different materials including seed, granular fertiliser, liquid, and anhydrous ammonia in different combinations
- ▶ As-applied mapping records where you've applied inputs
- ▶ Automates record keeping

TUVR and Serial Rate Control

- ▶ We can now do Trimble Universal Variable Rate and Serial Rate Control (both are a serial based protocol)
- ▶ Allows the Trimble display to send rate and section switching commands to OEM displays
- ▶ Serial based protocol



Seed Monitoring

- ▶ Increases the quality of seed placement and analyses population, singulation, skips/multiples, spacing, and quality of spacing for higher yield results
- ▶ Prevents costly planter problems by catching them early before they cause yield reduction

Field-IQ ISOBUS Control Solutions

Take Control of Your Crop Inputs

Trimble Field-IQ ISOBUS Control Solutions is compatible application control. It's about taking charge of your crop input costs and the implement you choose to get the job done. Integrating your implements doesn't mean doing away with old equipment. With Field-IQ ISOBUS Control Solutions, you can select from a full suite of ISOBUS-compatible products that allow you to save money and get more out of the equipment you already own.



Field-IQ ISOBUS

WEATHER STATION

- ▶ Sensor determines weather data and displays it on an ISOBUS terminal
- ▶ Can be connected to any compatible ISOBUS terminal to save weather data for records



Field-IQ ISOBUS

LIQUID CONTROL

- ▶ Can be used on any implement applying liquid
- ▶ Connect to any ISOBUS terminal



WeedSeeker 2 Automatic Spot Spray System



WeedSeeker 2 is the next generation spot spray system from Trimble Agriculture.



Designed with 25 years of weed killing experience, it delivers all-around superior performance to previous solutions. Using advanced optics and processing power, the WeedSeeker® 2 system detects and applies herbicide to weeds. When a weed passes underneath the sensor it signals the linked spray nozzle to precisely deliver herbicide and kill the weed, reducing the amount of chemical applied by up to 90%.

- ▶ Intelligent sensor
 - ▶ Reduces herbicide usage by up to 90%
 - ▶ Provides unbeatable accuracy
 - ▶ ISOBUS compatible
 - ▶ Lightweight sensors and cabling
- ▶ Provides expanded weed detection width with fewer sensors needed
 - ▶ Weed mapping and section control
 - ▶ Automatic turn compensation



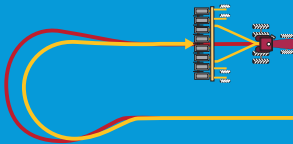
Save up to 90% on input costs

NextSwath 2 End-of-row Turn Technology

Trimble NextSwath™ 2 is our improved end-of-row turn technology that automatically calculates and executes the best path to turn around a vehicle and approach the next crop row (or swath) with the implement precisely aligned to begin working.

Why NextSwath?

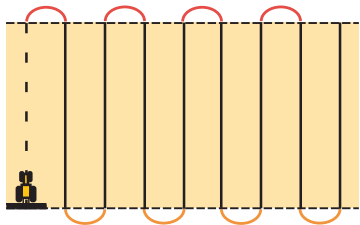
- ▶ Improves turning efficiency and repeatability
- ▶ Saves time, fuel costs, and prevents crop damage



NEXTSWATH 2 TURN PATTERNS

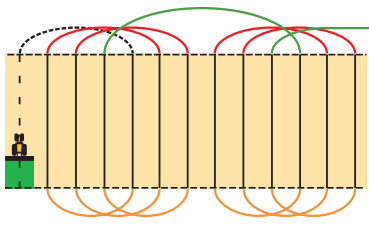
Standard Pattern

The standard “up and down” turn pattern for typical row crop applications. First introduced with Trimble’s original NextSwath feature release.



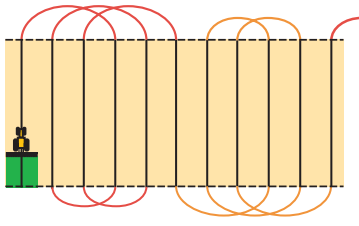
Continuous Block Pattern

A multi-row pattern which makes all turns in the same direction. Commonly used when working the ground, this pattern greatly reduces the risk of a collision between a drawn implement and the tractor. The easier turns reduces wear and tear on equipment but can cause headland compaction.



Alternating Block Pattern

Another row-skipping pattern which changes the direction of the turn for each group of swaths. Reduces wear on equipment, but offers more efficient field coverage and slightly less headland compaction due to fewer passes.



Correction Services

Trimble has been a leader in the market for nearly 40 years and our correction services are the backbone of every precision agriculture solution we offer. Increases in yield can be achieved by using any level of correction, no matter where you are located, Trimble has a correction service solution for your farm.

Which service is best for your farm?

1 Farmers whose high value crops demand highly accurate passes with year-over-year repeatability or who maximise their precision agriculture investment through high accuracy farming practices such as strip tilling or controlled traffic farming.

CenterPoint® RTX

For high accuracy anywhere on the farm, without set-up time, additional hardware or cell service interruptions.

Repeatability Accuracy	Convergence Time	Delivery	Compatible With	Coverage
2.5 cm	Fast <2 mins Standard <20 mins		TMX-2050, NAV-900	Standard convergence available worldwide

CenterPoint VRS

For high accuracy GNSS corrections via cellular modem, with no local base station required.

Repeatability Accuracy	Convergence Time	Delivery	Compatible With	Coverage
2.5 cm	Instant		TMX-2050, NAV-900	See coverage map

CenterPoint RTK


For high vertical accuracy required for water management practices, a local base station is required.

Repeatability Accuracy	Convergence Time	Delivery	Compatible With	Coverage
2.5 cm	Instant		TMX-2050, NAV-900	Local base station range

2 Farmers that do not need 2.5 cm level accuracy, but still want to increase the return on investment of their auto-guidance systems when spraying or spreading.


RangePoint® RTX

For increased accuracy, with the same ease of use as SBAS solutions, at an affordable price point.

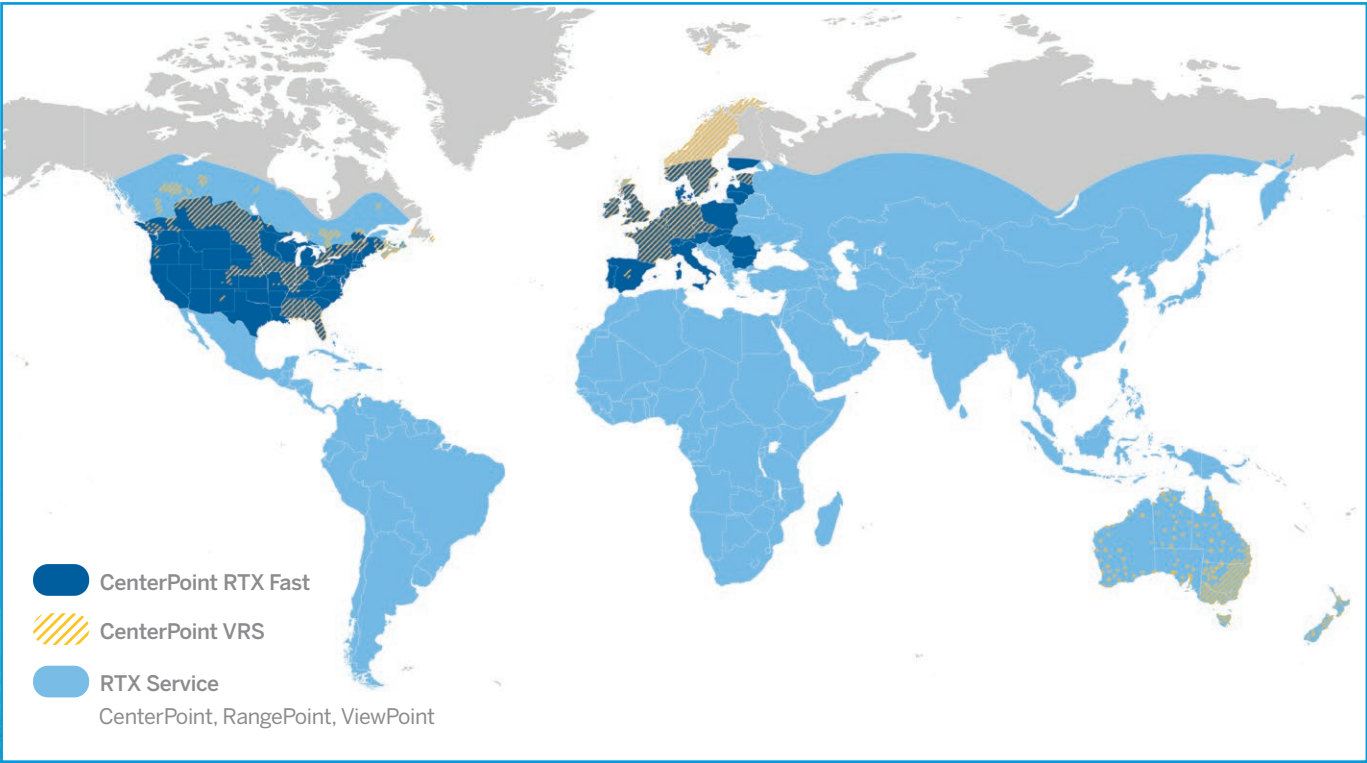
Repeatability Accuracy	Convergence Time	Delivery	Compatible With	Coverage
15 cm	5 min		TMX-2050, NAV-900	Worldwide

ViewPoint RTX™

For consistent pass-to-pass accuracy with entry-level Trimble guidance systems.

Repeatability Accuracy	Convergence Time	Delivery	Compatible With	Coverage
30 cm	5 min		NAV-500	Worldwide

Correction Services Coverage



Water Management

GRADE CONTROL, DRAINAGE AND LEVELLING

VerticalPoint RTK™

GNSS Enhancement

- ▶ Delivers maximum vertical accuracy for levelling and land forming
- ▶ Increases productivity of levelling projects during continuous in-field operations
- ▶ Survey, design, bulk, finish and verify
- ▶ Drives your productive time up to 95%
- ▶ Avoids costly downtime caused by drift from inconsistent vertical GPS signals

FieldLevel™ II

3D Machine Control

Field-proven solution for surveying, designing, and levelling.

Levelling:

- ▶ Surveys and maps your fields
- ▶ Creates a best-fit surface
- ▶ Automatically drives scraper hydraulic valves on any type of tractor and scraper (dual or tandem)

Levee design and installation:

- ▶ Designs your levees
- ▶ Analyses the shape of your field and contours, and guides your tractor as the levees are being installed

WM-Drain®

3D Machine Control

- ▶ Complete solution that streamlines the survey, analysis, design, installation, and verification steps of surface and subsurface drainage projects
- ▶ Ensures optimal 3D drain placement which improves crop yields by controlling ponding, optimising root depth, maximising planting seasons, and minimising nutrient loss



Boost yields up to 30% first year



WATER MANAGEMENT SOFTWARE

WM-Subsurface™

Design Software

- ▶ Improves placement of field tile and levees to increase crop yields
- ▶ Easily overlays other layers such as yield or soil types to help visualise the field from different perspectives
- ▶ Calculates the recommended pipe size for all pipes within a given design
- ▶ Compatible with the WM-Drain solution

WM-Form®

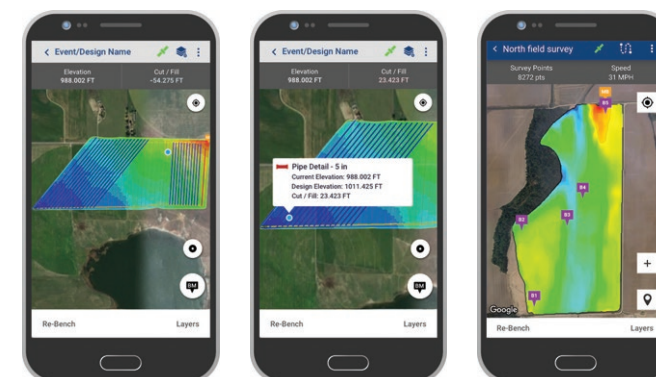
Design Software

- ▶ Enables the design of variable-shaped fields and topography based on existing contours, water needs of individual crops, and farming practices
- ▶ Levels fields with single or multiple planes
- ▶ Produces 2D cut/fill estimates and reports
- ▶ Enables the drainage of water in any direction and creates variable slope designs to optimise the surface for furrow irrigation
- ▶ Allows the generation of multiple design variations for the field
- ▶ Produces 2D cut/fill estimates and reports

WM-Survey II

SURVEY AND VERIFICATION APP

WM-Survey II™ is a standalone, free-to-download app for conducting basic field surveys for use in water management activities. Through paid subscriptions it also automates the creation of terrace and waterway cross-section profile designs as well as auto-creates rice levee designs. Compatible with any Android™ phone or tablet (version 9.0 or higher), as well as the GFX-750™ display, users can connect their own GNSS receiver to create topographic maps for use in a variety of applications.



- ▶ Automated terrace and waterway cross-section profile designs
- ▶ Automated rice levee designs allow same day installation
- ▶ Get to work installing designs minutes after completing field surveys
- ▶ Intuitive workflows guide users and reduce errors
- ▶ Save time with quick and easy verification of surface or tiling designs

Auto-Design Subscriptions

Enabled through optional subscriptions, WM-Survey II becomes even more powerful by automating the creation of certain surface drainage structures. Typically reserved for our water management design software packages, these advanced features can generate terrace cross-section profile designs, waterway cross-section profile designs, rice levee system designs, as well as the 3D surface control files and navigational guidance lines needed earthmoving equipment to implement the designs.

Terrace & Waterway Solution Subscription

The Terrace & Waterway Design solution allows the user to easily and automatically create a basic terrace or waterway design in just five steps. The 3D control files and feature line guidance files for compatible Trimble® displays are also auto-created, allowing land forming work to begin right away—no more waiting for designs to come back from the office. Farmers can now perform consistent maintenance, extending the life expectancy of terraces and waterways while boosting yields in terraced fields by up to 5%.

Rice Levee Design Subscription

The Levee Design subscription feature uses a five-step guided workflow to auto-create rice levees based on desired specifications and elevation across a field. Upon creation of the design, feature line guidance files are also exported and available for use in levee creation. Minimise yield loss from weather-delayed planting by building the levees right away. Eliminate the hours or days waiting for a designer to get back to you.

SPS986 GNSS Smart Antenna

The ultra-rugged SPS986 GNSS smart antenna offers unmatched reliability for agriculture positioning. Ideal for topographic mapping, research, or providing RTK corrections, the SPS986 can serve as a GNSS rover system or as a base station for other GNSS operations including machine guidance.



Workflow and Data Management Trimble Select

Farmer Core from Trimble Agriculture powers data-driven farm workflows for operations of all sizes. As the cornerstone of the Trimble Connected Farm® solutions, Farmer Core provides the tools to better plan and execute operations, as well as sync, centralise, and leverage valuable data from field work with connected displays. Connecting in-cab hardware to the Connected Farm ecosystem improves operational efficiencies and enables data-driven decision making.



Data and Resource Management

- ▶ Automatically add, edit, update and delete guidance lines, field names, boundaries, materials, implements, vehicles, and operator information across each connected display with the AutoSync™ feature
- ▶ Wirelessly send prescriptions created in Farmer Core or import from another agronomic application to connected Precision-IQ™ displays
- ▶ Automatically transfer as-applied data from each connected display into a centralised location on the web to analyse, create reports, or export in Shapefile format
- ▶ Create detailed field records for seed, chemical, fertiliser, harvest, and other applications

Work Orders

- ▶ Use Precision-IQ Display Work Orders to remotely configure and share tasks
- ▶ Select a Work Order in the Precision-IQ display to automatically configure the parameters for a task

Fleet Tracking

- ▶ Use Fleet dashboard to view vehicle location and current work state
- ▶ Access historical utilisation data to analyse task, vehicle, and operator productivity



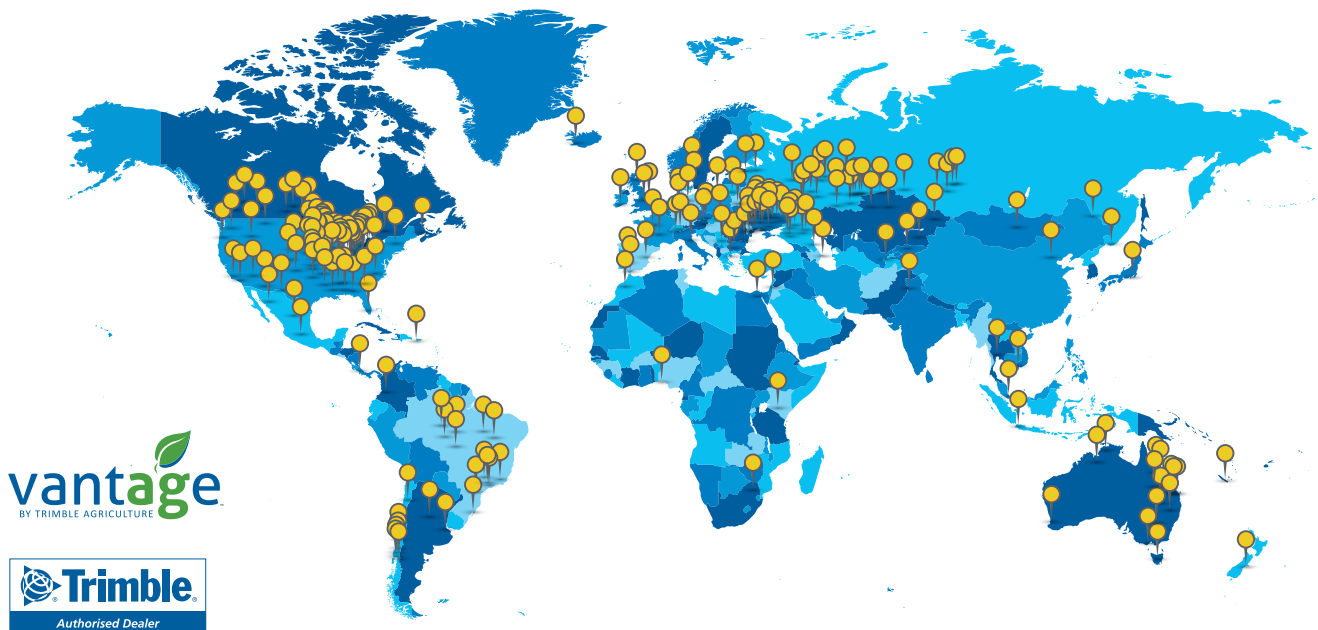
Trimble Select

Trimble Select is the first precision ag marketplace created by Trimble Agriculture to bring unique and complementary products to the farming community through Trimble's worldwide network of Vantage and Trimble Resellers. Trimble Select Business Partners are independent companies who market and distribute their products and services through Trimble's worldwide distribution network.

These partners can be found in every region that Trimble conducts business with primary emphasis in the Americas, Europe/CIS/Russia and Australia.



Global Reseller Network



Trimble's global reseller and Vantage networks offer in-depth technical knowledge and support for your core precision agriculture needs. Representing more than 130 countries, our resellers sell, service, and support the full suite of Trimble agriculture products and solutions.

Trimble's premier distribution network, Vantage, serves as a farmer's partner in precision agriculture. Vantage distributors around the world provide expert advice and seamless implementation of precision ag technology for use on your specific farming operation in order to maximise farm efficiency and productivity through the full range of integrated Trimble Agriculture hardware, software, and data solutions.



LEARN MORE AT: agriculture.trimble.com

FOLLOW US ON:     

TRIMBLE AGRICULTURE DIVISION
Trimble Agriculture Division
10368 Westmoor Drive
Westminster, CO 80021
USA
+1-720-887-6100 Phone
+1-720-887-6101 Fax

TRIMBLE INC.
Corporate Headquarters
935 Stewart Drive
Sunnyvale, CA 94085
USA
+1-408-481-8000 Phone
+1-408-481-7740 Fax

TRIMBLE GERMANY GMBH
Am Prime Parc 11
65479 Raunheim
GERMANY
+49-6142-2100-0 Phone
+49-6142-2100-140 Fax

© 2017–2021, Trimble Inc. All rights reserved. Trimble, the Globe & Triangle logo, CenterPoint, Connected Farm, EZ-Pilot, EZ-Steer, RangePoint, T2, Trimble RTX, WeedSeeker, WM-Drain, and WM-Form are trademarks of Trimble Inc., registered in the United States and in other countries. Autopilot, AutoSync, Field-IQ, FieldLevel, GFX-350, GFX-750, NAV-500, NextSwath, Precision-IQ, T3, TMX-2050, TrueGuide, TrueTracker, Vantage, VerticalPoint RTX, ViewPoint RTX, and WM-Subsurface are trademarks of Trimble Inc. Android is a trademark of Google LLC. The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc., and any use of such marks by Trimble Inc. is under license. Wi-Fi is a registered trademark of the Wi-Fi Alliance. All other trademarks are the property of their respective owners. PN 022503-0780-4-en-UK (09/21)