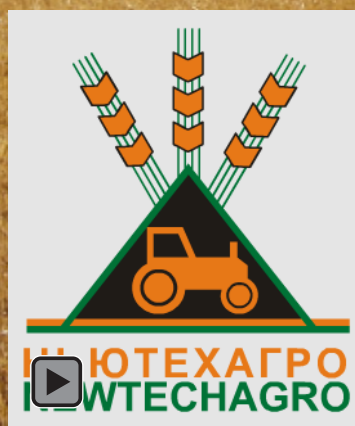


www.precisionfarming.ru  
8 (4732) 60 52 06

NEW AgGPS® FmX™  
Integrated Display



**TRIMBLE GPS,  
GUIDANCE AND  
PRECISION AGRICULTURE  
SOLUTIONS FOR ALL  
SEASONS, ALL CROPS,  
ALL TERRAINS,  
ALL VEHICLES**



**2009 Trimble Agriculture  
Product Portfolio**



Trimble Agriculture. The line everyone follows.



# TRIMBLE PRECISION AGRICULTURE THE LINE EVERYONE FOLLOWS

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### GUIDANCE



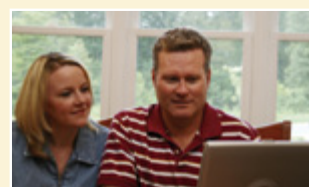
Trimble's guidance products help you complete field applications faster and more productively, accurately, safely and comfortably, with less operator fatigue.

### FLOW & APPLICATION CONTROL



Trimble's application and seeding products provide you with a complete field application solution enabling a more productive and efficient farming operation.

### INFORMATION MANAGEMENT



Trimble® Connected Farm™ software and services take the stress out of data management providing seamless field to office information management.

### WATER MANAGEMENT



The agriculture family of laser and GPS products provides accurate grade control to ensure adequate crop irrigation or drainage for maximum yields, while reducing water and installation costs.

NEW

**AgGPS Fm** Integrated Display



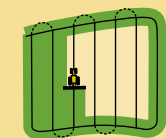
- 2 integrated GPS + GLONASS receivers (the latest GNSS Technology)
- A 12.1" / 30.73 cm color touch screen with plan and 3D views (35% larger than standard 10.4" / 26.42 cm)
- Supports Autopilot™, EZ-Steer®, TrueTracker™, FieldLevel II, EZ-Boom®, Tru Count, and Tru Application Control™ systems
- Integrated radio for RTK connections

## AgGPS EZ-GUIDE 500 SYSTEM



- Built-in dual-frequency GPS receiver offering multiple accuracy options
- Integrated lightbar with 31 bright LEDs
- USB flash drive to transfer files for printing maps and reports
- Compatible with EZ-Steer 500 or Autopilot steering systems
- Single-product variable rate technology capable

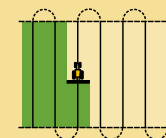
### HEADLAND



### PIVOT



### A-B PATTERN



### IDENTICAL CURVE

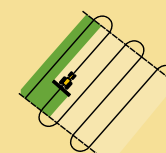


## AgGPS EZ-GUIDE 250 SYSTEM

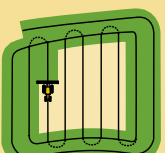


- Entry-level lightbar guidance system
- Easy-to-use and most affordable
- Built-in high performance DGPS receiver with Trimble OnPath® filter technology
- Ultra rugged aluminum housing
- Compatible with EZ-Steer 500 assisted steering system

### A+PATTERN



### MULTI HEADLAND



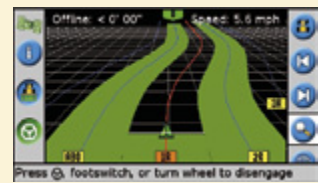
### FREEFORM



### ADAPTIVE CURVE



## AgGPS EZ-GUIDE 250 SYSTEM



15 bright guidance LEDs give you quick on-line visual feedback to keep you on track.

FreeForm™ guidance pattern offers the ultimate in guidance flexibility, allowing you to work in different patterns and shapes that best fit the layout and contours of your field.

**New!** Switch to NightMode for better visibility at night.

The built-in GPS receiver provides submeter DGPS accuracy, or upgrade to 6" – 8" pass-to-pass accuracy with the optional AG15 antenna.

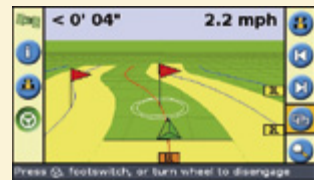


The 4.3" color screen allows you to see at a glance where you are, where you've been and what you have been doing.

**New!** Point, line and area feature mapping.



Simply transfer your day's work to your computer using a USB flash drive and easily print out coverage reports.



### Following the leader just got easier. And more affordable.

Trimble, the proven leader in GPS guidance technology, is proud to offer the EZ-Guide® 250 lightbar guidance system. With common-sense interface and a color screen, the EZ-Guide 250 system is easy to operate right out of the box. Plus, you can upgrade to the EZ-Steer® 500 assisted steering system, delivering a total package priced far less than the competition.

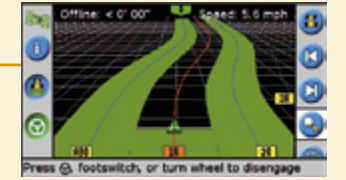
FEATURE	EZ-GUIDE 250
Large widescreen color LCD	4.3"
Bright guidance LEDs	15
3D & 2D swath graphics	✓
Built-in GPS receiver	✓
OnPath® filter technology	✓
EZ-Steer 500 ready	✓
DGPS (WAAS/EGNOS/MSAS) submeter accuracy	✓
Trimble® FreeForm guidance	✓
<b>New!</b> Mark and locate in-field hazards with feature mapping	✓
Import/export fields and coverage maps via USB	✓
Radar speed output	✓
GPS (NMEA) output	✓
T2™ terrain compensation when used with EZ-Steer 500	✓
<b>New!</b> Automatically locate stored fields as you drive near them with Trimble FieldFinder technology	✓
<b>New!</b> Switch to NightMode for better visibility at night	✓

## AgGPS EZ-GUIDE 500 SYSTEM

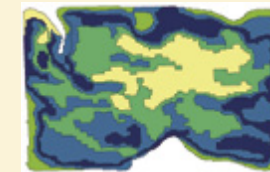


**New!** Precise application control with the single product variable rate technology (VRT) option. Works with the EZ-Boom® system or your existing rate controller.

31 bright LEDs give you quick on-line visual feedback in any light.



**New!** Switch to NightMode for better visibility at night.



With a built-in dual-frequency GPS receiver you get to choose your accuracy option without adding an extra GPS receiver to your cab.

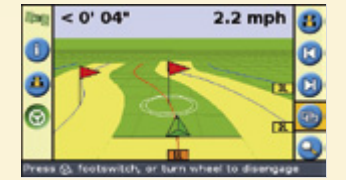


Choose from multiple guidance patterns, and between plan and 3D perspective views, to see where you are and what you've been doing.

**New!** Point, line and area feature mapping.



Simply transfer your day's coverage to your computer using a USB flash drive to generate printed maps and reports.



### The world's first GPS lightbar with color display, mapping and steering capable of 1 inch accuracy.

The EZ-Guide 500 system represents revolutionary innovation in lightbar guidance systems. Because it has a built-in dual-frequency receiver, you get to choose the accuracy you need from 6" – 8" up to 1" pass-to-pass, year-to-year without adding another GPS receiver to your cab. When you need a GPS guidance system that saves you time, fuel and inputs, look no further than the EZ-Guide 500 system—the cornerstone of lightbar guidance, hands-free farming and application control from Trimble.

FEATURE	EZ-GUIDE 500
Large widescreen color LCD	7.0"
Bright guidance LEDs	31
3D & 2D swath graphics	✓
Built-in GPS receiver	✓
OnPath filter technology	✓
DGPS (WAAS/EGNOS/MSAS) 6 – 8" accuracy	✓
OmniSTAR VBS 6 – 8" accuracy	✓
OmniSTAR XP/HP 3 – 5" accuracy	✓
RTK 1" accuracy	✓
Trimble FreeForm guidance	✓
<b>New!</b> Mark and locate in-field hazards with feature mapping	✓
Import/export fields and coverage maps via USB	✓
EZ-Steer 500 and Autopilot™ ready	✓
EZ-Boom ready	✓
Radar speed output	✓
T2 terrain compensation when used with EZ-Steer 500	✓
<b>New!</b> Automatically locate stored fields as you drive near them with Trimble FieldFinder technology	✓
<b>New!</b> Single product variable rate technology (VRT) option	✓
<b>New!</b> Switch to NightMode for better visibility at night	✓





Largest color touch screen available (12.1" / 30.73 cm).

A virtual lightbar gives you quick on-line feedback.

Two GPS + GLONASS receivers—precision with the vehicle, as well as the working implement behind the tractor where it really matters.



Integrated 450 or 900 MHz radios and external video input.

Toggle between plan and 3D views or zoom in/out with just a tap of your finger.

The AgGPS Fm<sup>™</sup> integrated display supports every application offered by Trimble.

**GPS 1**

- WAAS 6-8 inch accuracy
- OmniSTAR XP 3-5 inch accuracy
- OmniSTAR HP 2-4 inch accuracy
- RTK 1 inch accuracy
- GLONASS 1 inch accuracy

**GPS 2**

- WAAS 6-8 inch accuracy
- OmniSTAR XP 3-5 inch accuracy
- OmniSTAR HP 2-4 inch accuracy
- RTK 1 inch accuracy
- GLONASS 1 inch accuracy

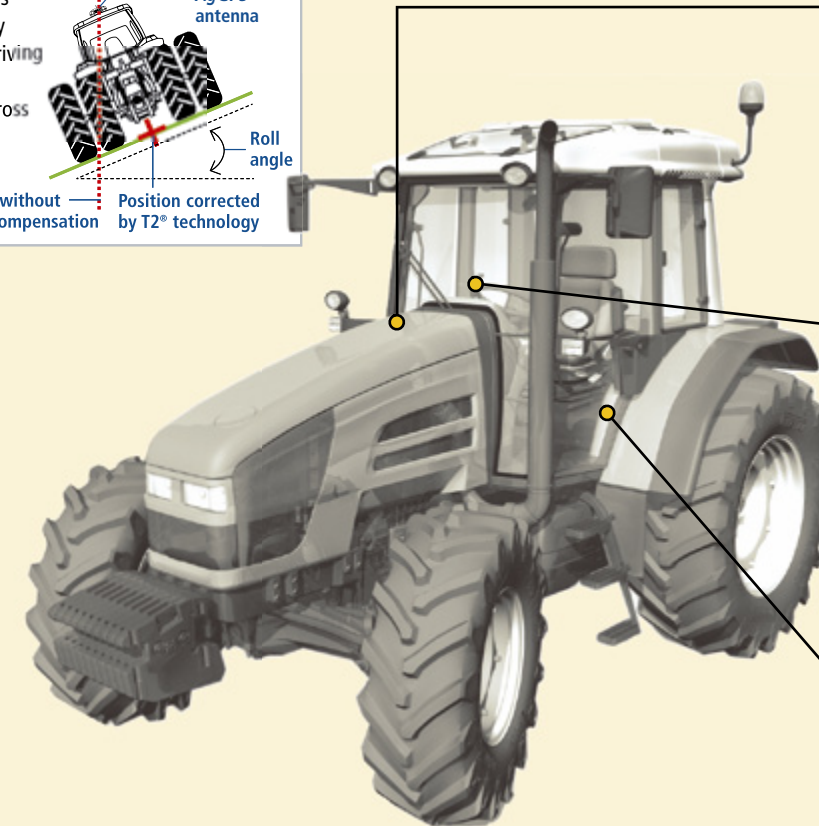
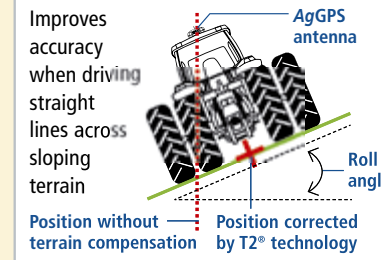
### Industry-first touch screen display with dual, integrated GPS+GLONASS receivers.

The AgGPS FmX integrated display gives you the best performance and reliability with the industry leading dual GPS + GLONASS receivers. Capable of handling everything you need in guidance, steering, and mapping from the touch of your fingers, the AgGPS FmX integrated display is the affordable choice to adopt as technology changes.

FEATURE	FmX
2 integrated GPS + GLONASS receivers (GNSS)	✓
Large color LCD	12.1" / 30.73 cm
4 Video inputs	✓
4 CAN ports / 4 RS232 ports	✓
USB	✓
Plan and 3D views	✓
Mapping	✓
Tru Count	✓
OnPath <sup>®</sup> filter technology	✓
DGPS (WAAS/EGNOS/MSAS) submeter accuracy	✓
EZ-Boom <sup>®</sup> ready	✓
Autopilot <sup>™</sup> ready	✓
TrueTracker <sup>™</sup> implement steering	✓
FieldLevel II land leveling	✓
EZ-Steer <sup>®</sup> 500 ready	✓
Planter monitoring and control	✓
Liquid sprayer control	✓



### T2 TERRAIN COMPENSATION TECHNOLOGY



#### FOOT SWITCH



Engage and disengage the EZ-Steer system with the optional foot switch for hands-free farming.

#### EZ-STEER MOTOR



The EZ-Steer motor receives electrical signals from the EZ-Steer controller and converts them to precise commands that the vehicle's steering system uses to keep the vehicle on path.

### Simple, portable hands-free farming for over 900 vehicle models—old and new.

The EZ-Steer 500 system turns the steering wheel for you by combining a friction wheel and a motor with GPS guidance from the the FmX integrated display, EZ-Guide<sup>®</sup> 500 or the EZ-Guide 250 lightbars. While the EZ-Steer system keeps you on line, you can focus on many different tasks, such as spray or planter performance, improving job quality and crop yields, while reducing fatigue.

#### RTK UPGRADE



Upgrade EZ-Steer 500 to RTK for repeatable 1" GPS positioning accuracy. This option requires use of the EZ-Guide 500 lightbar or FmX integrated display.

#### EZ-STEER CONTROLLER



Using data from the GPS receiver the EZ-Steer controller sends precise instructions to the steering wheel motor. T2 technology continually corrects for roll and yaw by using state of the art 4-axis solid state inertial sensors to give you a true on-ground position.



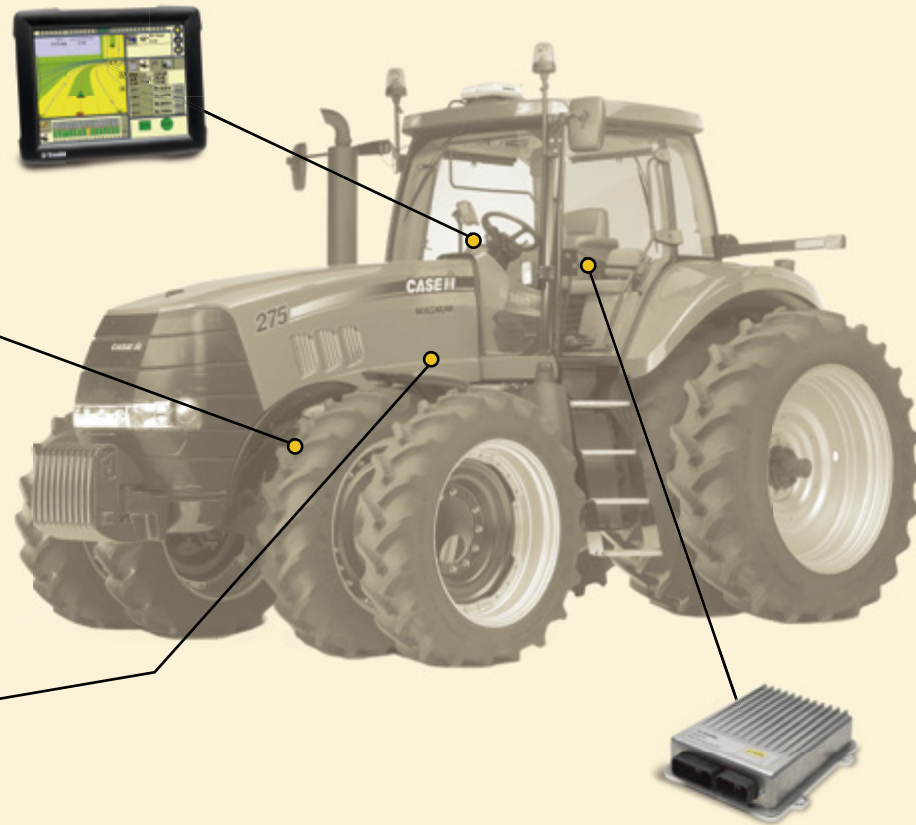
## AgGPS AUTOPILOT AUTOMATED STEERING SYSTEM WITH FmX INTEGRATED DISPLAY

### AgGPS AUTOSENSE STEERING SENSOR



This unique steering sensor measures highly accurate wheel angle information on all terrain. With patent pending technology the AutoSense™ steering sensor obtains information—without the use of moving parts or linkages—and continuously sends that information to the AgGPS NavController II.

The Trimble® AgGPS® Autopilot™ automated steering system provides one-inch repeatability from plant to harvest with any field pattern, and extends your operating hours with incredible precision.



### VEHICLE INTERFACE



The vehicle interface receives navigation commands from the AgGPS NavController II which control the vehicle's steering when engaged. The AgGPS Autopilot system supports ISO 11783, fly-by-wire, factory auto guidance components, or Trimble hydraulic control valves.

### AgGPS NAVCONTROLLER II



The NavController II sends T3™ terrain compensated corrections and precise steering instructions to the vehicle by using guidance and GPS information from the FmX integrated display.

### RTK GPS Networks

Trimble RTK networks currently cover over 300 million acres of North American farmland with additional acreage being added all the time. A network consists of a number of fixed RTK base stations that independently broadcast RTK correction signals so the vehicle can obtain sub-inch accuracy. Contact the Trimble reseller in your area to find out if they manage an RTK network and whether an annual or semi-annual fee is required.

## AgGPS AUTOPILOT RTK AND TRUETRACKER IMPLEMENT STEERING SYSTEMS

### AgGPS TRUETRACKER IMPLEMENT STEERING SYSTEM

### RTK SYSTEM

For +/-1 inch accuracy you can use the RTK network provided by the Trimble dealer in your area, or set-up an RTK base station on your farm to send corrected GPS positions to your tractor via radio.



### ZEPHYR ANTENNA



The Zephyr antenna mounts to the implement to provide 1" pass-to-pass and year-to-year accuracy to the NavController II mounted on the implement.

### AgGPS NAVCONTROLLER II



The NavController II sends T3 terrain compensated corrections and precise steering instructions to the implement by using guidance information from the FmX integrated display and RTK positions from the antenna mounted on the implement.

### IMPLEMENT GUIDANCE SYSTEM



The Trimble® TrueTracker implement steering system works with any implement that can be mechanically steered. This includes potato equipment, planters, strip tillage rigs, and 3-point mounted equipment. Supplemental systems such as the Orthman® Tracker IV or Sunco Acura Trak can be added to most implements making them controllable with the TrueTracker system.

### AgGPS TrueTracker implement steering system

The AgGPS TrueTracker™ system keeps implements on a repeatable path, even on extremely sloped fields and variable soils. It includes a GPS antenna and T3 terrain compensation technology mounted on the implement. The AgGPS FmX™ integrated display in the tractor communicates guidance information to the TrueTracker system, instantly adjusting implements such as tillage tools, strip tillers, drills and planters, cultivators, sprayers and harvesters to follow directly in the path of the tractor. With repeatable accuracy the TrueTracker system improves seedbed and nutrient placement helping to enhance crop stands and yields.



## TRIMBLE AUTOMATIC SECTION CONTROL

### SAVE MONEY IN INPUTS.

Trimble's automatic section control shuts off rows or sections automatically avoiding double applying and wasting inputs. The system works with seed, liquid and anhydrous and features inch-level control of up to 24 sections for savings that can exceed 5%. It's the ideal upgrade for your guidance display from Trimble, and it can be further upgraded to variable rate for even more savings.



#### PLANTING ROW SHUTOFF

- Use the Tru Count Air Clutch® by Trimble to avoid wasting expensive seed
- Avoid double planting in headlands and point rows to help increase yields
- Control up to 24 rows with the Trimble® Tru Application Control™ system or up to 10 rows with the EZ-Boom® system

Upgrade to seed monitoring and variable rate seeding



#### SPRAYING BOOM SECTION CONTROL

- Save on liquid fertilizer and chemicals with automatic boom section control by reducing overlap and minimizing skips
- Operator productivity improved by not having to slow down and manually turn off the application at the ends of the rows and no spray
- Trimble now offers fast boom shutoff valves for even more precise shutoff
- Control up to 24 sections with the Trimble Tru Application Control system or up to 10 sections with the EZ-Boom system

Upgrade to variable rate liquid controls



#### ANHYDROUS AMMONIA SECTION CONTROL

- Save on expensive anhydrous ammonia using automatic section control by reducing overlap and minimizing skips
- Trimble now offers fast anhydrous shutoff valves for even more precise shutoff
- Control up to 24 sections with the Trimble Tru Application Control system or up to 10 sections with the EZ-Boom system

Upgrade to variable rate anhydrous ammonia application

## AgGPS EZ-BOOM 2010 AUTOMATED APPLICATION CONTROL SYSTEM



Cut your farm's input costs immediately using the AgGPS® EZ-Boom 2010 automated boom switching and spray rate controller system for your next field application. Using GPS, up to ten boom sections can be automatically turned on and off to avoid overspray and untreated gaps on end rows—resulting in more precise application for all field work and less stress on the operator when navigating headlands, waterways and other demanding driving situations. The AgGPS EZ-Boom 2010 system now also works on planters using Trimble's Tru Count Air Clutches which helps you save on seed.

### AUTOMATED BOOM OR ROW SWITCHES

Ten boom or row sections use GPS positions from the AgGPS EZ-Guide® 500 lightbar, AgGPS EZ-Guide Plus lightbar, AgGPS FieldManager™ display or the AgGPS FmX™ integrated display to automatically detect boom or row sections that need to be turned on or off for precise coverage. The ten switches can also be used for manual control of boom or row sections.



### RATE SWITCHES

The R1 and R2 switches can be set to predefined rates so when changing from one application to another it's just a flick of the switch to change the application rate. With the **+** and **-** switch you can increase or decrease the current application rates when your field requires a quick change.



### CONNECTORS

- One cable connects the EZ-Boom 2010 system to the display.
- Another cable connects the EZ-Boom 2010 system directly to existing flow meters and valves, so the EZ-Boom system is simple to plug and play into your sprayer system—adding automatic boom switching all in the same box.

### DISPLAY OPTIONS

#### AgGPS EZ-GUIDE PLUS LIGHTBAR



#### AgGPS EZ-GUIDE 500 LIGHTBAR



#### AgGPS FmX INTEGRATED DISPLAY





## PLANTER/DRILL



### GROUND SPEED SENSOR



Ground speed sensor provides accurate vehicle speed information for precise product control.

### IMPLEMENT SWITCH



Implement switch enables ON/OFF control based on implement raised or working positions.

### HOPPER LEVEL SENSOR



Hopper level sensor alerts the operator when product level is low for planter and drill applications.

### PLANTER/DRILL APPLICATION MODULES



Monitors and controls all sensors in the system while communicating with the FmX integrated display.

### PRODUCT MONITORING

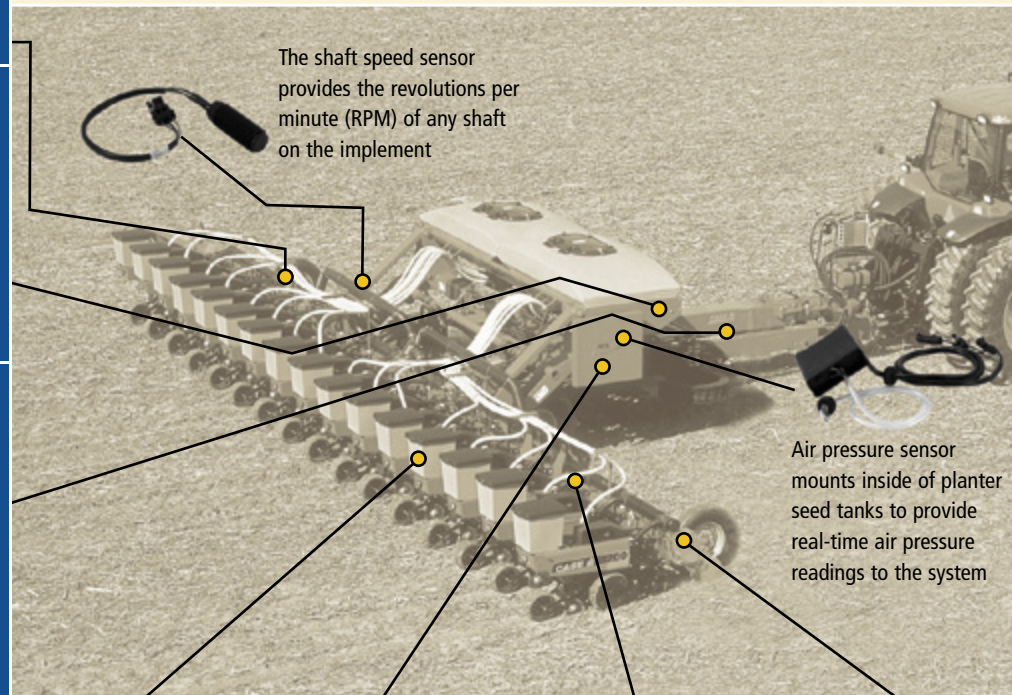


Liquid flow meter ensures accurate feedback to the liquid control channel for optimal control accuracy.

### Accurate monitoring and control for planter and drill applications

In combination with the AgGPS® FmX™ integrated display, the planter functionality allows for seed, liquid, and granular application by providing:

- Monitoring and control for up to 4 products
- Monitoring for up to 70 rows of seeding (population and blockage type sensors supported)
- Monitoring for 1 hopper level sensor
- Monitoring for 1 air pressure or 1 RPM sensor
- Implement switch input for ON/OFF control based on implement up/down
- The choice of speed input (GPS, radar, or the ability to enter manual speed)
- Advanced mapping with the ability to track seed varieties and log material attributes
- Up to 4-Channel Variable Rate Technology (VRT) capabilities
- Advanced overlap control for up to 24 individual rows via Tru Count clutches



#### SEED SENSOR



Blockage or high rate population style seed sensor provides seed population or blockage information to the operator.

#### SHAFT SPEED MONITORING



Application rate sensor precisely measures shaft rotation speed, enabling accurate product control.

#### TRU COUNT CLUTCH CONTROL



Automatically controls planter rows ON/OFF for precise seed placement.

#### PRODUCT CONTROL



Seed, liquid, and granular control via pulse width modulated hydraulic valves and/or servo valves.

## TRU COUNT CLUTCHES BY TRIMBLE



### Tru Count Air Clutches by Trimble save you money on seed

- Placed on each row the Tru Count Air Clutch® allows you to control the row with compressed air from the tractor cab through a GPS controller. With almost instant activation or deactivation there is no lag time in clutch stop or startup
- By avoiding double planting in headlands and point rows, air clutches save wasted seed costs and deliver increased yields
- Tru Count clutches can be used in a large number of planters including John Deere, Kinze, Case IH, White, Monosem, and Great Plains

### TRU COUNT AIR CLUTCHES



Tru Count Air Clutches start and stop the flow of seed almost instantly using the commands from your section control unit and GPS. One clutch per row is always needed, regardless of the number of rows.

### AIR COMPRESSOR



The air compressor is mounted on the tractor or planter and supplies air to the system. The air tank is mounted on the planter and is connected directly to the compressor with the supplied tubing. The tank(s) supply the air valves with air as needed.

### AIR VALVE MODULES



Air valve modules turn the air clutches on/off. Each module commands up to 4 control sections and each control section can have 1 to 4 clutches. Multiple modules can be used to increase the number of sections.

Choose either the EZ-Guide® 500 lightbar or AgGPS FmX integrated display as your source for both GPS and overlap detection. Customers with the AgGPS EZ-Guide Plus lightbar can also use their existing display.



### EZ-BOOM 2010 SYSTEM



The EZ-Boom® system automatically commands up to 10 Control Sections. The EZ-Guide 500 lightbar or AgGPS FmX integrated display automatically keeps track of seeded areas and shuts off row sections at precisely the correct time. To upgrade to seed population control choose the Rawson drive and ACCU-RATE variable rate controller.

### TRU APPLICATION CONTROL



The Tru Application Control™ system can command up to 24 control sections for the ultimate precision. Additionally, the system can monitor populations on up to 148 rows and control up to 4 channels of seed, liquid or granular material by changing the rates either manually or automatically using a prescription. The system works with the FmX integrated display.



# AIR SEEDER, STRIP-TILL, AND ANHYDROUS



## HOPPER LEVEL SENSOR



Hopper level sensor provides real time feedback on hopper level status in air seeding applications.

## AIR PRESSURE SENSOR



Air pressure sensor mounts inside of air seeder seed tanks to provide real time air pressure readings to the system.

## AIR SEEDER APPLICATION MODULES



Monitors and controls all sensors in the system while communicating with the FmX integrated display.

## PRODUCT MONITORING



Liquid flow meter ensures accurate feedback to the liquid control channel for optimal control accuracy.

### Accurate monitoring and control for air seeding/strip-till applications

In combination with the AgGPS® FmX™ integrated display the air seeding functionality allows for seed, liquid, granular, and anhydrous ammonia (NH3) application by providing:

- Monitoring and control for up to 4 products
- Monitoring for up to 148 rows of blockage sensors
- Monitoring for up to 4 hopper level sensors
- Monitoring for up to 4 air pressure sensors
- Monitoring for up to 3 accessory RPM sensors
- Implement switch input for ON/OFF control based on implement position
- The choice of speed input (GPS, radar, or the ability to enter manual speed)
- Advanced mapping with the ability to track varieties and log attributes
- Variable Rate Technology (VRT) capabilities

### Accurate monitoring and control for anhydrous applications

In combination with the AgGPS FmX integrated display, the anhydrous functionality allows for accurate anhydrous ammonia (NH3) application by providing:

- Advanced overlap control with the ability to turn sections ON/OFF for Anhydrous application
- Monitoring and control for up to 2 anhydrous channels and up to 2 liquid or granular channels
- Implement switch input for ON/OFF control based on implement position
- The choice of speed input (GPS, radar, or the ability to enter manual speed)
- Advanced mapping with the ability to track NH3 activities and log attributes
- Variable Rate Technology (VRT) capabilities

## HEAT EXCHANGER



NH3 heat exchanger ensures optimal anhydrous application by enabling faster runs at lower tank pressures.

## PRODUCT MONITORING



Anhydrous ammonia (NH3) flow meter is designed specifically for accurate anhydrous flow.

## PRODUCT CONTROL



Anhydrous ammonia (NH3) control via servo valves.

## NH3 SECTION CONTROL










Advanced overlap control with anhydrous section control valves.

## IMPLEMENT SWITCH



Implement switch enables ON/OFF control based on implement position.



GROUND SPEED SENSOR	SHAFT SPEED (RPM) SENSOR	SHAFT SPEED MONITORING	PRODUCT CONTROL	SEED SENSOR & IMPLEMENT SWITCH	GROUND SPEED SENSORS
 <p>Ground speed sensor provides accurate vehicle speed information for precise product control.</p>	 <p>Shaft speed sensor provides the revolutions per minute (RPM) of any shaft on the implement. The sensor can easily count teeth on a gear, magnets on a shaft, or lug nuts on a wheel.</p>	 <p>Application rate sensor measures shaft rotation speed, enabling accurate feedback for product control.</p>	 <p>Seed, liquid, granular, and NH3 control via pulse width modulated hydraulic valves and/or servo valves.</p>	 <p>The seed sensor provides seed flow or blockage information to the system.</p>  <p>The implement switch enables ON/OFF control based on implement position.</p>	 <p>Ground speed sensors provide accurate vehicle speed information for precise product control. GPS, Radar, and Manual modes provide the ultimate in flexibility in selecting a ground speed source that fits the users preference.</p>



## SPRAYER



### GROUND SPEED SENSORS



Ground speed sensors provide accurate vehicle speed information for precise product control. GPS, Radar, and Manual modes provide the ultimate in flexibility in selecting a ground speed source that fits the user's preference. A back-up mode ensures the user will always have a speed source for system control.

### Accurate monitoring and control for spraying applications

In combination with the AgGPS® FmX™ integrated display, the sprayer functionality allows for accurate liquid application by providing:

- Monitoring and control for up to 4 products
- Monitoring for up to 4 pressure sensors
- Monitoring for up to 3 RPM sensors
- The choice of speed input (GPS, radar, or the ability to enter manual speed)
- Advanced mapping with the ability to track spraying activities and log attributes
- Variable Rate Technology (VRT) capabilities
- Advanced overlap control with the ability to turn up to 24 boom sections ON/OFF

### PRODUCT MONITORING



Liquid flow meter ensures accurate feedback to the liquid control channel for optimal control accuracy. Multiple flow meter options including support for many Raven™ flow products ensures the optimal solution based on the application. We support Raven Flow Meter, Fast Rate Control Valve and Pressure sensors.

### SPRAY BOOM CONTROL



Automatically controls spray booms ON/OFF for precise spray coverage. The ability to control each boom ON/OFF increases spraying accuracy reducing chemical costs and losses associated with unnecessary skips and overlap. We now offer section control valves in addition to supporting ones from Raven, TeeJet and others.



### SPRAYER APPLICATION MODULE



Monitors and controls all sensors in the system while communicating with the FmX integrated display.

### PRODUCT CONTROL



Liquid control via pulse width modulated hydraulic valves and/or servo valves.

### PRESSURE MONITORING



Reads liquid pressure for real time pressure monitoring via the FmX integrated display.

## SPREADER



### GROUND SPEED SENSORS



Ground speed sensors provide accurate vehicle speed information for precise product control. GPS, Radar, and Manual modes provide the ultimate in flexibility in selecting a ground speed source that fits the user's preference. A back-up mode ensures the user will always have a speed source for system control.

### Accurate monitoring and control for spreading applications

In combination with the AgGPS FmX integrated display, the spreader functionality allows for accurate granular application by providing:

- The choice of speed input (GPS, radar, or the ability to enter manual speed)
- Advanced mapping with the ability to track spreading activities and log material attributes
- Variable Rate Technology (VRT) capabilities
- Monitoring and control for up to 4 products
- Monitoring for up to 3 hopper level sensors
- Monitoring for up to 3 RPM sensors

### PRODUCT CONTROL



Granular control via pulse width modulated hydraulic valves and/or servo valves. Utilized to control product metering shafts.



### SHAFT SPEED MONITORING



Application rate sensor measures shaft rotation speed, enabling accurate feedback for product control.

### SHAFT SPEED (RPM) SENSOR



Shaft speed sensor provides the revolutions per minute (RPM) of any shaft on the implement. The sensor can easily count teeth on a gear, magnets on a shaft or lug nuts on a wheel.

### SPREADER APPLICATION MODULE



Monitors and controls all sensors in the system while communicating with the FmX Display. Main module supports all sensors required to accurately control the spreader application.



# THE CONNECTED FARM



### FIELD DATA

- Field data logging on in-cab displays
- guidance lines
  - as-applied maps
  - equipment tracking
  - equipment/operator productivity metrics
  - sensor logging

### Incoming to the cab

- next job(s)
- guidance lines
- prescription maps

With EZ-Office software, you can order input supplies directly from Ag retailer based on farm management plan

Using the AgManager asset tracking solution order equipment servicing based on machine hours being recorded

File application reports before the vehicle returns from the field

### OFFICE

Upload or download data files, configurations or firmware

The Connected Farm makes it easier to share data and plan the farm operation with your local agronomist

Trimble's Connected Farm™ strategies simplify the day-to-day management for all of your equipment and operators while ensuring the necessary farm records are being collected at your fingertips—whenever and wherever you need them. The Connected Farm technology spans your in-cab precision control, field record keeping and seamless field to office information flow.

## Asset Management & Reporting

Improve asset utilization by precisely pinpointing asset location and productivity. Trimble's Agriculture Manager™ asset management system is a secure client-server application that allows the farm manager to track and report asset productivity, improve coordination of multiple vehicles during busy periods, and log machine hours for more timely servicing.

FEATURE	AGRICULTURE MANAGER
Know asset location to improve productivity, deter theft or improve operator safety	✓
Keep track of machine hours for timely servicing	✓
Keep track of productive time vs. down time with sensors (e.g., ignition on/off, sprayer ON/OFF, combine separator ON/OFF)	✓
Geo-fence to track and alert a manager in real-time when a vehicle enters or exits an area	✓
Send dispatch instructions to a mobile data terminal	✓
Create customized charts, reports and a control dashboard to monitor your entire operation's assets	✓

## Record Keeping & Reporting

Farm management record keeping is the foundation for improving your farm operation. Trimble offers a range of record keeping tools with seamless field to office data transfer and data management to make record keeping easy. You can start with the job summary report that is automatically generated on the EZ-Guide® 250 and EZ-Guide 500 lightbars and AgGPS® FmX™ integrated display. Step up to EZ-Office™ software for advanced record keeping, order input supplies directly, reporting and management of field records, farm inputs, vehicles, operators, guidance lines and vehicle guidance settings. EZ-Office software can be expanded to use up-to-date databases of chemicals, seed varieties, equipment and more, so you can deploy subsets of this data onto your Trimble displays for more accurate record keeping in the field.

FEATURE	JOB SUMMARY CREATED ON DISPLAYS	EZ-OFFICE SOFTWARE
View & print job record with coverage map	✓	✓
Client, farm, field, event record keeping		✓
Guidance line view, print & manage		✓
Save vehicle guidance configurations		✓
Staff or operator record keeping		✓
Input supplies record keeping		✓
Attribution for displays—seed varieties, chemicals applied, etc.		✓



# AgGPS FIELDLEVEL II SYSTEM FOR WATER MANAGEMENT

**NEW**  
Now Supports Dual and Tandem



Trimble Water Management Solutions help minimize water costs and efficiently distribute water by maintaining grade. Even better, the FieldLevel II system now supports dual and tandem applications.

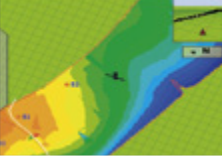



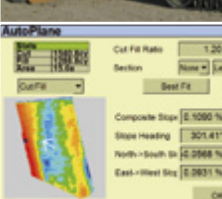
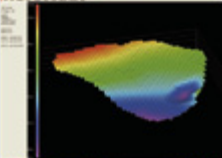
## RUGGED FIELD COMPUTER

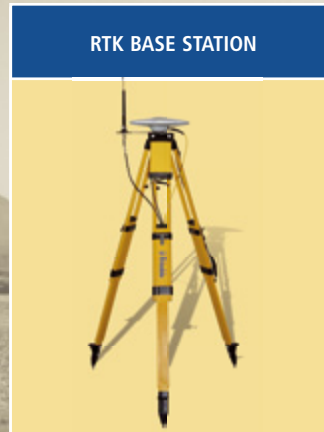
The same AgGPS® FmX™ integrated display that you use with your precision guidance and control applications can also be used for your water management operations. With data collection, design and control functionality built right into this powerful display, managing your leveling and drainage operations has never been easier or more defined.

## SURVEY—DESIGN—LEVEL

Topographic data can be collected via the FmX integrated display while using the AgGPS Autopilot™ system or stand-alone. Using the collected topographic data you can design the shape of the field right on the FmX integrated display. With the completed design you can immediately start leveling. The FieldLevel II system on the FmX integrated display allows you to survey, design and level—all from the convenience of the cab. If you need to explore more scenarios for field designs, simply take the topographic survey to the office and work with AgGPS MultiPlane software. The finished MultiPlane design can quickly be loaded into the FmX integrated display to shape the field surface.

The FieldLevel II system has a constantly expanding range of features to address all of your water management needs.

<b>TOPOGRAPHIC MAPPING</b>	
Use the built in survey function to record field elevations.	
<b>LEVEE MARKING</b>	
Use Contour guidance mode to drive elevation contours.	
<b>TILE AND SURFACE DRAINAGE</b>	
Use Point and Slope mode to control to a constant slope regardless of direction.	
<b>UNIFORM SLOPES FOR IRRIGATION AND DRAINAGE</b>	
Use the simple Point to Point mode to quickly level to a precise slope.	
<b>AUTOPLANE</b>	
Best fit design on board with the press of a button.	
<b>MULTIPLANE</b>	
Office software package for complex designs.	



RTK BASE STATION



AgGPS FmX INTEGRATED DISPLAY

## AgGPS FIELDLEVEL RTK SYSTEM

Single set-up option available, depending on your operational size, up to a seven-mile radius from the base station.



# TRIMBLE LASER CONTROL SYSTEMS



## SPECTRA PRECISION® LASER GL700 SERIES

- Innovative technology ensures higher accuracy
- Six robust models to match your requirements, applications, and price range
- Remote **grade changing**
- Active **temperature compensation**
- Long-range **wireless remote**
- Unmatched **beam stability and beam drift**



## TRIMBLE GRADE CONTROL SYSTEMS

Cost-effective automated machine control systems that improve productivity and accuracy of agricultural drainage and leveling equipment by up to 50%.

GCS 300/400		GCS100
CB415 UNIVERSAL CONTROL BOX	LR410 LASER RECEIVER AND SR300 SURVEY RECEIVER	CB40/LR40 LASER RECEIVER
		



## OUR COMMITMENT...

Trimble has developed leading-edge, proprietary positioning technology in its receiver line of products. Users benefit from high accuracy and flexible solutions for the most challenging applications and environments. This technology is shared across multiple platforms from our current lightbars and GPS receivers

to our next generation GNSS products. The range of receivers, antennas, and smart antennas offer accuracy and price points to suit any farming operation, budget and vehicle—not to mention tough enough for harsh agriculture environments.

## YOUR CHOICE...

Trimble is committed to providing the range of GPS accuracy required for optimal productivity in the field. **To choose a receiver, the first consideration is the accuracy level required for your operations. The second consideration**

**is what type of real-time correction is available in your area.** Use the diagrams and information below to decide what level of GPS accuracy and real-time source your operation requires.

### AgGPS 442 AND 432 GPS RECEIVERS

The addition of GLONASS and L2C signals gives the AgGPS 442 receiver excellent performance in tough satellite environments and areas with intermittent periods of GPS signal availability.



- With advanced 72 channel L1/L2/L2C/GLONASS/RTK capabilities, the 442 receiver is an excellent high accuracy RTK receiver using a local RTK network or base station
- The AgGPS 432 receiver utilizes the same receiver hardware as the AgGPS 442 but does not have GLONASS tracking capability enabled. The AgGPS 432 can be upgraded with a passcode to track GLONASS satellites
- The integrated display and keypad gives you quick access to configuration
- Repeatable year-to-year accuracy
- Built-in radio

### NEW AgGPS 262 RECEIVER

All in one, low profile GPS/DGPS/RTK receiver and antenna.

- Low-profile, high performance dual-frequency GPS receiver and antenna
- Your choice of accuracy level depending on your operation including RTK (with a base station), OmniSTAR HP/XP, OmniSTAR VBS or SBAS (WAAS, EGNOS, MSAS)
- Easy upgrade to a higher accuracy level
- Gives you repeatable year-to-year row crop operation



### AgGPS 900 RADIO

Rugged low-profile design suitable for all agriculture applications.

- Highly reliable even in the most demanding radio frequency environments
- Versatile, with a frequency range that can receive real-time data used by Trimble GPS receivers
- License free in North America, Canada, Australia, and New Zealand



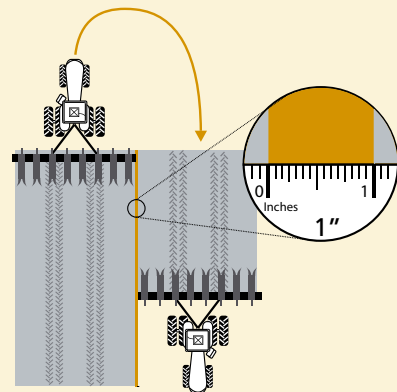
### NEW AgGPS 162 RECEIVER

All-weather low-cost DGPS smart antenna for yield or field mapping and Autopilot compatible.

- SBAS (WAAS, EGNOS, MSAS) differential GPS receiver and antenna combined in a compact, robust, weatherproof housing
- Provides DGPS information to any precision agriculture equipment that accepts NMEA
- Simple strong magnetic mounting and 5/8" thread option
- Simulated radar output

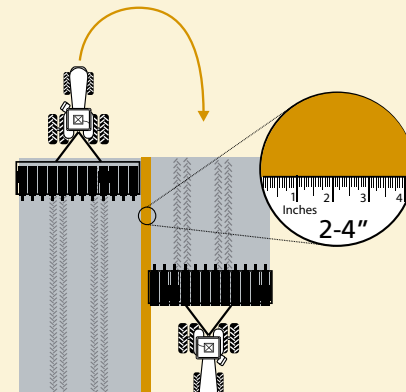


#### RTK



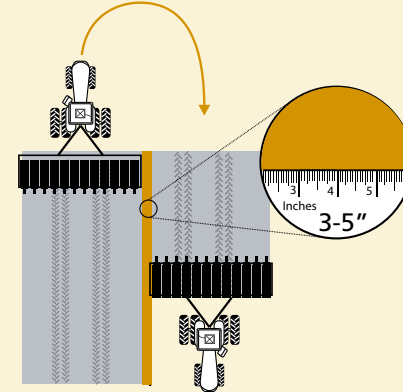
+/-1 inch pass-to-pass  
+/-1 inch year-to-year repeatable

#### OMNISTAR HP



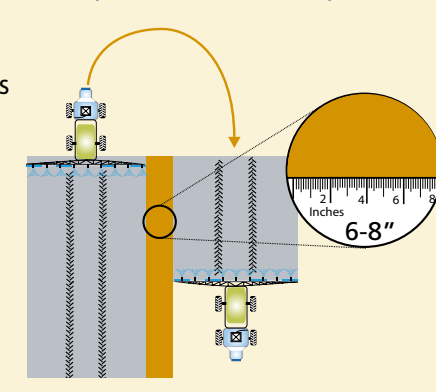
+/-2-4 inch pass-to-pass  
+/-4 inch year-to-year repeatable

#### OMNISTAR XP



+/-3-5 inch pass-to-pass  
+/-8 inch year-to-year repeatable

#### SBAS (WAAS, EGNOS, MSAS), OMNISTAR VBS



+/-6-8 inch pass-to-pass  
+/-3 feet year-to-year repeatable



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