

# 2017 Product Guide

APPLICATION

DISPLAYS

HARVEST

PLANTING

SOFTWARE

STEERING & GUIDANCE

VIDEO

WATER MANAGEMENT



# MAPS PRODUCT GUIDE

**WHO WE ARE** MAPS is a full-service agronomic provider that supplies precision agriculture solutions through services, sales and support to customers looking to add value to their farming operation. The products and services available assist farmers in gaining insight into their fields to improve management decisions. All the services and solutions offered by MAPS are customized and tailored for each farmer's individual needs to best fit their specific farming objectives.



**X25 | 8" Display**



**AES-25 | Electric Steering**



**SRG-1 | Receiver**



**AGI-4 | Controller**

## INTRODUCING TOPCON

MAPS is proud to announce that we are now an official dealer of TOPCON Agriculture Solutions products.

Farmers need to produce more with less, to maximize efficiency, and to operate more profitably, while protecting the environment and precious natural resources. That is why Topcon products are painstakingly designed to offer superior value through improved operational efficiency and input cost reduction.

The agricultural solutions from Topcon address all seasons, crops, terrains and vehicles including tractors, applicators, and harvesters.

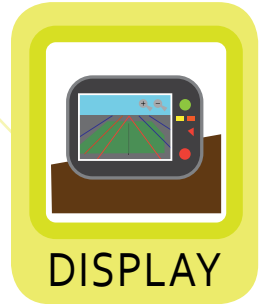
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# MAPS PRODUCT GUIDE

**Ag Leader**  
Technology



**COMPASS** | 7" Display



**INCOMMAND 1200** |  
12.1" Display



**INCOMMAND 800** | 8.4" Display

## COMPASS

### AN ENTRY-LEVEL SOLUTION OFFERING GUIDANCE AND VIRTUAL TERMINAL CAPABILITIES

The Compass display offers integrated onscreen guidance to increase accuracy and extend working hours. Additionally, the Compass display supports the most common and advanced guidance patterns, including SmartPath™.

Features:

- Compact design with built-in lightbar
- 7" color touchscreen
- Built-in manual guidance
- Combine with OnTrac3™ assisted steering or SteerCommand™ with GPS 6500 integrated steering system for high-end guidance
- Compatibility with ISO 11783 Virtual Terminal Standard
- Fullscreen mapping

## 800

### VERSATILE PRECISION AG DISPLAY

Our sleekest, most flexible display ever. Loaded with new looks and interaction all with the same user-friendly functionality you've come to expect from Ag Leader.

The InCommand 800 display serves as an economical hub for your precision farming operations.

Features:

- Tablet-like interaction
- Swipe, pinch, pan and zoom gesture support
- Touch and go homescreen apps
- Satellite imagery background
- Display to display communication
- Integrated lightbar
- Year-round functionality
- ISOBUS/Universal Terminal/Task Controller
- WiFi adapter included
- Syncs data, maps with iPad using AgFiniti® Mobile

## 1200

### THE FLAGSHIP OF THE INCOMMAND LINE

Our smartest, simplest, most flexible display ever. Loaded with advanced features and user-friendly functionality you've come to expect from Ag Leader.

Features:

- Tablet-like interaction
- Touch and go homescreen apps
- Split screen view
- Row by row mapping
- Display to display communication
- Satellite imagery background
- Integrated lightbar
- Advanced planter control
- Year-round functionality
- ISOBUS/Universal Terminal/Task Controller
- WiFi adapter included
- Syncs data, maps with iPad using AgFiniti Mobile

# MAPS PRODUCT GUIDE



X30 | 12.1" Display



X25 | 8" Display



X14 | 4.3" Display

## X14

### FULL COLOR 3D TOUCH SCREEN PACKED WITH FEATURES

Designed for entry-level guidance, the X14 offers Horizon software in a simple, easy-to-use format. A full color 3D touchscreen offers moving map guidance or autosteering, as well as a virtual on-screen lightbar. Full-featured for its size, the X14 offers a modular design with on-screen navigation menus, a range of steering patterns, plus coverage mapping and return-to-point.

Features:

- Full range of dEasy-to-learn, easy-to-use, easy-to-upgrade

## X25

### A POWERFUL CONSOLE FOR MACHINE CONTROL AND AUTOSTEERING

The X25 can simultaneously display three separate functions on-screen and is rugged, reliable, easy-to-use, and offers ISO compatibility. It allows adoption of precision farming practices into more operations to lower input costs, increase machine automation, and enable higher operational efficiency.

It includes all features of the X14 plus:

- Multi-touch screen with mini-view drag-and-drop info windows
- Full mapping and data management capability
- Full ISO UT and ISO TC embedded
- Basic and advanced feature packages for any size operation
- Exportable boundary, coverage, logging and as-applied maps

## X30

### AN INTUITIVE USER INTERFACE WITH AN ICON-BASED, USER-DEFINABLE, MULTI-TOUCH SCREEN

This premium-featured console offers mini-view, drag-and-drop info windows, user-definable dashboard, and interactive keypads. It can simultaneously display five different functions on-screen, while providing a wealth of control and display options that give feedback from multiple points throughout your equipment. Because it is designed with Topcon modularity, it is easy to upgrade as your farming needs grow.

It includes all features of the X25 plus:

- Variable Rate Control (VRC) for up to 8 products
- 30-section auto section control (ASC) of sprayer, spreader, or planter
- Up to 32-section ASC with ISO task controller (TC) interface

# MAPS PRODUCT GUIDE

**Precision**  
PLANTING

20/20  
SEEDSENSE



20/20 SEEDSENSE with FieldView

**20/20 SEEDSENSE TAKES THE BLINDFOLD OFF, SO YOU SEE WHAT YOU'RE REALLY PLANTING**

Easy to navigate, easy to see results.

20/20 SeedSense has everything you'd want to know about your planter's performance on screen, and it's easy to navigate with intuitive touch points.

Find hidden mechanical problems and correct them at planting. Perfect your planter performance by adjusting meters, vacuum pressure, transmissions and speed. Improve productivity and measure and adjust down force.

Pair with Climate FieldView to take information from your 20/20 SeedSense and conveys it through instant, high-definition maps. It just makes sense.

DISPLAY



**MAPS CARRIES A FULL LINE OF AG CAMERAS THAT CAN BE INTEGRATED WITH AG LEADER and TOPCON DISPLAYS**

Choose from these Dakota Micro Products: Ag Cam Camera Systems, Overview and Overview Wireless Cameras, Ranch Hand Wireless and Innopro Camera Systems



## 1. AG CAM

- 100% waterproof
- Camera optics are able to function in highly dusty conditions
- Able to withstand high vibration for long periods of time

## 2. OVERVIEW WIRELESS

- Built-in, high quality CCD camera with high performance infrared (IR) illuminator modules
- 2.8mm Camera lens provides 120 degree field of view

## 3. OVERVIEW

- Watertight cameras
- Automatic IR night vision gives you 45'+ of viewing in complete darkness
- Unique bracket design allows camera to be mounted in ANY orientation field of view

## 4. RANCH HAND WIRELESS

- Waterproof housing
- Sealed against extremely high humidity
- Allows for easy wireless upgrade to your AgCam system

## 5. INNOPRO

- Ruggedized IP Camera Built in the U.S.A.
- IP69 – Waterproof Under Pressure
- Shockproof, Suitable for Nearly Any Use
- Built-In, High Quality CCD Camera

**Also available are third-party Camera Adapter Cables for the following Displays and Monitors:**

JD 2630 Display, JD Command Center Adapter, JD 6R Command Center, CNH Intelliview Displays, Topcon X30, Trimble FMX, Trimble CFX 750, Ag Leader Integerra, Ag Leader Versa, AGCO C1000 Monitor, AGCO C2000 Monitor and AGCO GTA Monitor

# MAPS PRODUCT GUIDE



## GUIDANCE & STEERING



**AES-25 |**  
Electric Steering



**SRG-1 |** Receiver



**AGI-4 |** Controller



**HiPerV |** Receiver



## AES-25

### PRECISE STEERING CONTROL FOR ANY MACHINE

AES-25 is an advanced solution for all platforms - from basic steering to those striving for high-accuracy results. AES-25 is fully compatible with the Topcon AGI-4 and X Family of Consoles. AES-25 not only provides precise steering control, but is a superb alternative to common hydraulic steering systems.

With a quiet, high-torque motor, the AES-25 provides silent operation and the most accurate electric steering in the world. The AES-25 does not intrude into the operator's working area, but simply replaces the steering wheel, and can be overridden simply by grasping the wheel and steering manually.

- Fast, accurate steering response
- Up to 2cm performance accuracy
- Full terrain compensation
- Reverse operation
- Convenient, simple installation

## AGI-4

### AGI-4 RECEIVER / STEERING CONTROLLER

The AGI-4's all-in-one, modular design incorporates the antenna, receiver and steering controller in a single component, offering unmatched upgradeability. AGI-4's steering system features state-of-the-art inertial sensors and full terrain compensation for superior line acquisition and holding capabilities.

The AGI-4 comes standard with WAAS and EGNOS, but is easily upgradeable to 2cm accuracy with RTK radio options. Like all Topcon receivers, the AGI-4 offers GNSS multi-constellation satellite reception standard for unmatched accuracy in dynamic applications and terrain conditions.

## SRG-1

### BIG PERFORMANCE. SMALL PACKAGE.

This compact, rugged receiver provides simultaneous processing of GPS and GLONASS signals with 32-channel high speed, universal tracking. The SGR-1 features Topcon TruPass advanced positioning technology for higher, more stable pass-to-pass accuracies in dynamic ag applications. The SGR-1 also outputs ground speed as simulated radar for improved slow speed operations such as seeding and spraying.

## HiPER V

### VERSATILE GNSS RECEIVER FOR EVERYDAY FIELDWORK

The HiPer V boasts multiple communication methods using unique radio types for unique job sites as well as a fast internal cellular modem to perform MAGNET Relay sessions, turning your HiPer V into a mobile reference station.

- Capable of tracking GPS and GLONASS constellations
- Universal Tracking Channels capable of all-in-view tracking
- Signal scrubbing Fence Antenna® to provide ultimate signal lock
- Offers choice of UHF or Spread Spectrum radios, as well as an optional, internal cellular modem

# MAPS PRODUCT GUIDE

## ONTRAC 3

### THE ECONOMICAL WAY TO ADD ASSISTED STEERING TO YOUR OPERATION

- Quick, easy "Lock-n'-Roll" installation
- Easily transfer between vehicles
- Auto-calibration for simple vehicle tuning and calibration
- Gear driven motor
- New clutchless, brushless Mechanical Drive Unit
- Nine-axis terrain compensation
- LED diagnostic lights
- Easy to engage/disengage from the display
- Controlled by all current offering Ag Leader displays
- Custom install kits available on over 700 vehicles



Adding integrated steering to your setup will pay for itself in only 1,769 acres of farmed ground.

ONTRAC 3 | Steering



GUIDANCE & STEERING

STEERCOMMAND

GPS | Base



GPS | Receivers

**Ag Leader**  
Technology

## GPS RECEIVERS

### UNRIVALED GNSS TECHNOLOGY

- Differential corrections include GLIDE, WAAS/EGNOS
- GLONASS standard
- GLIDE offers improved accuracy without subscription-based differential correction
- Increased signal uptime provided by standard StableLoc™ technology
- LED diagnostics for at-a-glance system monitoring
- Integrated magnets and included mounting plate with locating pins provide repeatable mounting
- Sealed, compact, rugged design

## GPS 6500 Base

### HIGH ACCURACY, REPEATABILITY AND RANGE

- GPS 6500 with Relay 400 or Relay 900 have base and rover functionality
- Wi-Fi capability allows for easy web browser setup from any smartphone or tablet
- GLONASS standard

## STEERCOMMAND

### BEST-IN-CLASS AUTOMATED STEERING PERFORMANCE

For growers seeking an integrated steering experience, SteerCommand offers best-in-class integrated steering performance when paired with GPS 6500 for repeatable, precision steering via RTK correction.

- Access to CORS and RTK networks for repeatable sub-inch accuracy with GPS 6500 combined with Relay
- GPS 6500 with SteerCommand supports GLIDE, WAAS/EGNOS, TerraStar and RTK
- Nine-Axis Terrain Compensation
- Internal compass helps maintain steady heading

## GPS 6000

Single-frequency receiver designed for general mapping and AutoSwath functions with up to 10 Hz output.

## GPS 6500

Fully scalable, rugged Smart Antenna, designed to meet the needs of extended RTK baselines in excess of 20 miles utilizing the Relay CDMA or Relay GSM via a NTRIP solution.

Differential corrections include GLIDE, WAAS/EGNOS, TerraStar and RTK (with Relay). Up to 20 Hz output.

# MAPS PRODUCT GUIDE



## CROPSPEC



### CROP CANOPY SENSORS FOR NUTRIENT MAPPING

The use of crop sensing technology in cereal and grain crops is one of the fastest growing segments in precision farming. Topcon CropSpec crop canopy sensors work with either the X30 or X25 consoles to monitor in-field variability. CropSpec units mount on the cabin roof out of harm's way, providing the largest sensor footprint in the industry, attaining more accuracy in application. CropSpec sensors measure plant reflectance to determine chlorophyll content, which correlates to nitrogen concentration in the leaf. This non-destructive, non-contact measurement method provides accurate, stable readings with repeatable values.



## DIRECTCOMMAND

### COMPLETE CONTROL OVER LIQUID AND GRANULAR APPLICATION

Whether you have an NH<sub>3</sub> toolbar, Liquid N sidedress unit, sprayer, spreader or electric starter fertilizer pump on your planter, DirectCommand will transform the application process, allowing for maximum control.

- Liquid and Dry Rate Control
- Eliminate overapplication, overlap, and spray drift
- Increase productivity during tight application windows
- Applying multiple products at one time
- Compatible with NORAC UC-5 Height Control

ISOBUS Task Controller offers capability for single-product ISOBUS-equipped sprayers, provides support for AutoSwath™ Control, Prescription Rate Control and Data Logging.



**Ag Leader**  
Technology

OptRx Crop Sensors measure crop health and provide application rate recommendations in real time to maximize your profit.

## UC-5

### ULTRASONIC SENSING FOR BOOM HEIGHT CONTROL TECHNOLOGY

- Intuitive User Interface
- Automatically maintains a preset height above the ground or crop
- Adjust spray nozzle height on-the-go with the push of a button
- Shows the height that the nozzle tips are from either the top of the crop or the soil
- May override using existing in-cab controls
- Quick and easy to use with NORAC's automated setup and user-friendly interface
- Compatible with Ag Leader and Topcon Displays

**NORAC**  
— TOPCON POSITIONING GROUP —



# MAPS PRODUCT GUIDE



## 360 SOILSCAN

### DON'T GUESS HOW MUCH NITROGEN YOU HAVE LEFT IN YOUR SOIL – KNOW

360 SOILSCAN is a portable soil testing system that lets you accurately test nitrate nitrogen availability and soil pH right in your field, in about five minutes.

- Field-side soil nitrate and pH analysis
- Fast and accurate results
- Rugged case protects it from the elements
- Four sensor slots to allow for future innovations
- Easily transported and operated from the back of your truck or ATV
- Uses your iPad® as the operating platform and upgrades without new hardware

### EASY TO TRACK FIELD INTELLIGENCE

360 YIELD PATROL® the new 360 SOILSCAN companion app for iPad and iPhone®.

- Record and track soil samples using QR codes
- Store soil test data digitally
- Link information between 360 YIELD PATROL and 360 SOILSCAN
- Compatible with NORAC UC-5 Height Control

## 360 UNDER COVER



### APPLY FUNGICIDES, INSECTICIDES AND NUTRIENTS UNDER THE CROP CANOPY

When plants aren't healthy, nitrogen utilization can be limited and yields can suffer. With 360 UNDERCOVER, you can target your fungicide, insecticide and nutrient application where it's needed most — under the crop canopy.

- Flexible fungicide, insecticide and nutrient applications
- Under-canopy application
- Targeted application



## Y-DROP | Sprayers



## Y-DROP | Sidedress

### UNIQUE DESIGN ENABLES YOU TO APPLY LATE-SEASON NITROGEN — EVEN UP TO TASSEL

Corn uses 75% of its nitrogen after V10. Make sure it has enough nitrogen to finish the season strong with 360 Y-DROP. 360 Y-DROP allows you to apply nitrogen exactly where it's needed — as late as VT, giving you the widest sidedress window ever, for more flexibility and bigger yields.

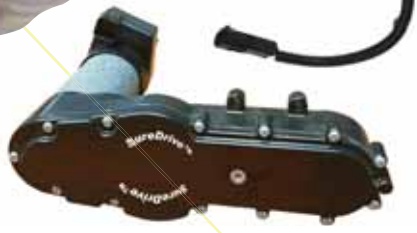
- Variable rate nitrogen application
- Apply nitrogen within 2 to 3 inches of the stalk base
- Y-DROP gives you the flexibility to extend the midseason application window from V6 to VT
- New narrow-row design with four-position adjustable arms allows precision placement in 15-inch to 36-inch rows
- Variable rate nozzles are available
- New breakaway mounting brackets
- Newly designed shield
- Available in 20-inch to 30-inch row spacing.
- You can install and remove it easily on most sprayers

### 360 Y-DROP SIDEDRESS

Where you place nitrogen is just as important as when you place it. Upgrade your coulter bar with 360 Y-DROP Sidedress and get precise nitrogen placement well into V6 for more flexibility and bigger yields.

- Later-season nitrogen application
- Precision nitrogen placement
- Simple retrofit to existing coulter bar

# MAPS PRODUCT GUIDE



## SUREDRIVE - Control your meter at the row.

True to Ag Leader's traditional "color-blind" approach, SureDrive is built to install on most major planter brands on the market. Uniquely, the efficient, yet high torque electric drive motor isn't tied to a specific brand or type of seed meter, including hard pulling finger meters, making it able to optimize the meter and planter you already have.

- Maintenance free
- Four cold forged, high-grade steel gears, precision bearings and a drive chain, all submersed in a full synthetic fluid bath
- Turn compensation

## ADVANCED SEED MONITORING

SeedCommand offers complete planter monitoring functions, eliminating the need for an additional planter monitor.

View row-by-row performance in real-time on:

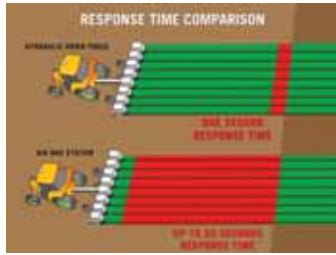
- Population
- Spacing quality
- Seed spacing
- Skips
- Doubles



## VARIABLE RATE CONTROL

Enables variable rate application by product for more efficient use of inputs. Variable rate allows the operator to utilize prescription maps for seeding and application rates, matching their seed and fertilizer inputs to attributes such as soil type.

## HYDRAULIC DOWN FORCE



Ag Leader's Hydraulic Down Force system adjusts pressure instantly in changing soil types without the inconsistency created by pneumatic systems that respond over a longer period of time.

It could take an air bag system up to 20 seconds to inflate enough to create the proper down force, compared to one second with Ag Leader's Hydraulic Down Force System. The difference? A quarter acre using a 24-row planter.

## SURE-VAC SHUT OFFS

Using GPS, Ag Leader's SeedCommand or a compatible planter control system communicates with SureVac to turn planter sections on/off based on field maps and already-planted areas. The shutoff stops seed flow by cutting off the vacuum at the top of the seed disk. Planting is stopped and seeds fall back into the seed meter's seed pool. When the shutoff device is pulled away from the seed disk, vacuum is restored and planting continues as normal.

SureVac is designed for John Deere Pro-Series™ XP row units, but is also compatible with any John Deere vacuum seed meter manufactured in the last 20 years.

**The Next Generation of SeedCommand is here!**

# MAPS PRODUCT GUIDE



## CONSER CLUTCHES



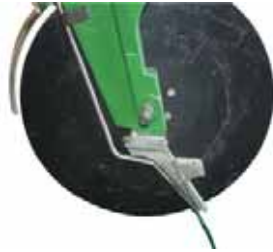
### PLANTER CLUTCHES FOR PROVEN CONTROL

Our heavy-duty clutches prevent over-planting at end rows and headlands. The Conser Clutch includes 6 stops instead of 4 for faster response time. The electric clutches shut off half of the planter and are perfect for small fields where single row precision isn't a concern.

- Controlled automatically by GPS, or manually with a switch box



## FERTILIZER SYSTEMS



### COMPLETE LIQUID FERTILIZER PLANTER KITS

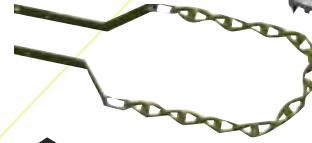
Starter fertilizer is finally easy! Dual function design places seed and fertilizer simultaneously. Keep liquid fertilizer off of your expensive machines!

- The 3/4" wide Fin made of UHMW plastic ensures long wear life and replaces the traditional 1" wide seed firming wheel. The narrower Fin provides more consistent seed depth. In moist or wet seeding conditions, it eliminates lifting of seed from the furrow by the rolling wheel.
- The Fin places liquid fertilizer at the deepest point of the furrow. Regardless if the Fin is brand new or worn to 50%, the patented design keeps the delivery point deep in the furrow.

**ALSO AVAILABLE:** Wigler Flow Manifolds and Brackets and Liquid Fertilizer Tubes



## ROW CLEANER



## DRAG CHAIN

### ROW CLEANERS

### PROVIDE A DESIRABLE TYPE OF TILLAGE

Martin row cleaner teeth continuously engage the soil to the shallow depth of 1" to 1 1/2". The scarifying of the soil's surface layer makes it easier for the seed openers to open a well-defined "V" but without furrowing out or causing slabbing or fleaking. Martin Row Cleaners come in two basic types: rigid and floating and offer the following:

- 3/8" thick, high-strength, right- and left-toothed wheels with diamond shaped points
- Stationary triple-lip seals and heavy-gauge oval dust caps
- Double tapered bearings and greaseable hubsbox

### DRAG CHAINS

### LEVEL ROW AND SEAL AIR POCKETS

Following behind the Spading-Closing Wheels the Martin Till Twisted Drag Chain helps to further crumble and level the soil. This helps even out the rate of drying and insures the soil does not dry past seed depth. This is a low cost, low maintenance way to help increase uniform emergence in the drier parts of the field and is a must when using the spading closing wheels in minimum till.

- Heavy square edge cross chain and brackets
- Bolts to all MaxEmerge units
- Fits Kinze and White units with bolt-on wheels
- Kinze units with roll pin attached closing wheels will need holes drilled for mounting



## APOLLO

### APPLICATION CONTROL FOR CEREAL GRAIN SEEDING SYSTEMS, MULTI PRODUCT VARIABLE RATE CAPABLE



Bring a new level of productivity and efficiency to your cereal grain seeding system. Apollo ECUs make the complex functionality of running an Air seeder easy through one-touch adjustments and easy to use controls.

Apollo features robust, stackable packaging with ISO capability for interfacing with your existing Tractor Universal terminal (UT).



Apollo

# MAPS PRODUCT GUIDE



Precision<sup>®</sup>  
PLANTING



FURROWJET

NEW FOR  
SPRING 2017!

FURROW JET

## FOR IDEAL STARTER PLACEMENT

Precision Planting has developed a new planter fertilizer attachment called FurrowJet, which accurately places liquid fertilizer in ideal locations for nutrient absorption.

The attachment integrates dual-band near furrow 3/4" placement with optional third band in-furrow for maximum plant uptake, rate flexibility, and suited for a wide range of liquid product options.

- Designed for simplicity and flexibility
- FurrowJet's placements give the seedling and crown roots immediate and continuous access to the nutrients

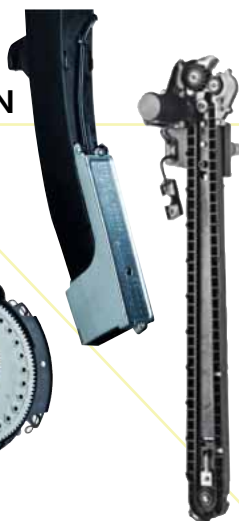


eSET | Meter

WAVE VISION



vSET | Meter



SPEED TUBE

The MAPS Hardware Team  
Specializes in  
Planter Meter  
Installation &  
Calibration!

## MECHANICAL PRODUCTS for PLANTING

**eSET METER** It has a flat disk with a single vac setting, eliminating constant adjustments. The eSET Meter releases seeds down the center of the tube – critical to optimum spacing. Our standard model fits John Deere vacuum planters that use standard sized hoppers. Our John Deere ProSeries Meter model fits vacuum planters that have the mini-hopper used in planters with the central hopper, including the new MaxEmerge 5 planter. All components mount to your existing meter housing, simply.

**vSET METER** vSet has a relentless singulator for all kinds of seeds, plus it's plug and play — just install and go. With vSet Select, you get all the performance of vSet, doubled. Multi-hybrid planting has a high ROI and is suddenly easy to do. See the future of meters in vSet Select.

**SPEED TUBE** Planting with SpeedTube enables accurate seed spacing at any speed

**CLEAN SWEEP** CleanSweep® does all that hard work for you. It puts row cleaners right where they need to be – where they move the residue but not the soil – and continuously adjusts them as field conditions change. All you need to do is move the cab-mounted controller.

**WAVE VISION** WaveVision sensors and seed tubes don't depend on optics. They don't see seeds, they detect mass, using high-frequency sensors. They can tell the difference between seeds and dust or debris, and count only the seeds.

**KEETON SEED FIRMERS** With its unique, in-the-trench design, the Keeton Seed Firmer is the only thing that gently firms those seeds to the bottom of the V. So the depth is even.

MECHANICAL

## MAPS IS YOUR PRECISION PLANTING PREMIER DEALER

A Precision Planting Premier Dealer is a world-class certified precision agriculture expert, with rigorous training and knowledge of the industry and issues facing you today. Our Premier Dealers are experienced professionals helping you know and yield more. A Premier Dealer is the only specialist that can offer the entire Precision Planting product line.

# MAPS PRODUCT GUIDE

**Precision**  
PLANTING



## vDRIVE

### ROW BY ROW CONTROL

vDrive is a custom planter on each row. Whatever you need and ask of that row happens. Period. Combine them with vSet meters and get amazingly precise population control through curves and ground speed changes.

- Male & female
- Independent rows
- Prescription accuracy
- Manage curves



## ROW FLOW | Control System

## ROW FLOW

### PLANT FOR THE RIGHT POPULATION

Each motor plants the population precisely by zone.

- Execute variable rate prescriptions
- Avoid overpopulation
- Swath control
- Compatible with eset



## PLANTING

## AIRFORCE



## AirForce

### INSTANTANEOUS AND AUTOMATIC INCREASE OR REDUCTION IN DOWN FORCE AS NEEDED

AirForce continuously adjusts the applied down force to changing soil types by changing the pressure in your air bags as conditions and hopper weights change, so you maintain proper depth. It's configured specifically for your planter.

- Correct seed depth
- Healthy root systems

## DeltaForce



## DELTA FORCE

### BAD ROOT STRUCTURE IS A HIDDEN LOSS

AirForce's Big Brother with individual row control. From flat fields to varied terrains, and across all soil types, each row as unique control.

- Hyper-responsive hydraulics
- Two directions of control



## DRILL CRUISER®

- Unique combination of sidewall crumbling and soil firming
- Angular tooth design helps prevent clogging.
- Works in virtually all soil - from sandy to heavy and clay-based
- Provides improved seed slot closure in both conventional and no-till situations.
- Especially effective in saturated soil

**CopperheadAg**  
PRODUCTS



## FURROW CRUISER®

- Allows young roots to penetrate sidewalls
- Fits into your existing closing wheel hubs
- Prevents furrow from re-opening
- Angular tooth design helps prevent clogging
- Built-in depth control allows for use with multiple crops
- Works in virtually all soil and tillage conditions
- Especially effective in saturated soils

# MAPS PRODUCT GUIDE



**Ag Leader**  
Technology



## YIELD MONITOR

### YIELD MONITOR SOLUTION FOR INSTANT CROP YIELD AND MOISTURE DATA

Ag Leader provides the most widely used grain yield monitoring technology in the world. Create and view yield and moisture maps while harvesting and instantly observe how field conditions affect yield. Make year-round management decisions based on this valuable information.

Yield Monitoring Products from AgLeader consist of: SMS Software, Displays, GPS Receivers and Guidance and Steering.



## YIELD SAVER

### REDUCE HEADER LOSS

Traditional corn heads have gaps in the deck plates and gathering chains that result in corn kernels falling right through. 360 YIELD SAVER eliminates those gaps by adding intermeshing bristles to traditional gathering chains to capture significantly more kernels.

- Mounts easily on corn heads
- Provides a similar wear life to other gathering chains
- Chain includes crop lugs to improve stalk feeding
- 360 YIELD SAVER blocks easily attach to chain
- Simply replace blocks when they wear out
- Chain wear life similar to conventional chains
- Block life expected to be one to one and a half seasons



## YieldTrak

## YIELDTRAKK

### YIELD MONITOR SOLUTION FOR INSTANT CROP YIELD AND MOISTURE DATA

Add field-proven yield monitoring technology to your combine. YieldTrakk gives you higher accuracy yield and moisture monitoring with mapping. Capturing and recording today's yield and moisture data enables better management to maximize your yields, productivity, and profits. YieldTrakk works on virtually any combine and is easy to install, use, and calibrate.



## CHAIN ROLL

### ENGINEERED FOR PERFORMANCE

Create the right environment for soil microbes and nitrogen availability with a new approach to residue management. 360CHAINROLL chops and crimps stalks, making residue more available to microbial breakdown for better soil health and nutrient availability.

- Precision cutting, sizing and residue management
- Directly replace old stalk rolls



## 360 BULLET

Most rippers do a good job of leaving the surface smooth and level. But what about the soil underneath? With 360 BULLET, you can fracture the complete soil profile, eliminating subsurface berms left by other ripper points for better root penetration and access to nutrients.

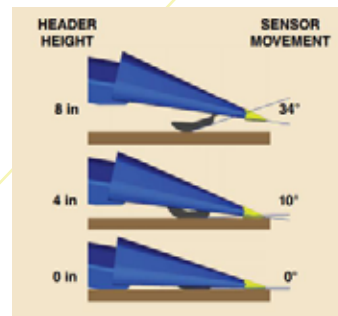
# MAPS PRODUCT GUIDE



## HORIZON

### THE MOST ADVANCED HEADER CONTROL SYSTEM

Headsight's Horizon Controller provides superior header height performance, reliability and integrated header features to the in-cab virtual terminal interface. Advanced features include automatic calibration, in-cab monitoring and control of header functions for many leading aftermarket header companies, the PinPoint® diagnostic system to continuously monitor wiring and sensors, the ability to support up to 7 height sensors, and standard Headsight features.



## FORESIGHT

### PRECISION OPTION FOR CORN HEADER CONTROL

Foresight is an innovative header control system that compensates for snout movement - using ordinary height sensors to get extra-ordinary results.

- Improves header control near the ground
- Increases harvestable yield in down corn
- Adds protection for chopping heads
- Allows faster harvest speeds

*Foresight comes standard on the Headsight Horizon Controller, and is a upgrade option available on the Headsight Insight controller.*



TrueSense Sensor Installed

## HEADSIGHT GUIDANCE SYSTEMS

**HORIZON TRUESENSE** Row guidance that uses Headsight's crop sensor with Truesense module using the OEM steering controls

**HORIZON TRUESENSE+** Row guidance that uses Headsight's single crop sensor design with Horizon and the OEM steering controls. Allows Factory row guidance to be used with off brand heads.

**TRUESIGHT 2** Truesight 2 row guidance continues the tradition of class-leading performance and flexibility while adding features for the modern harvesting operation.

## YIELDSENSE

### MAKE SENSE OF YOUR YIELD DATA AND MAKE BETTER DECISIONS FOR YOUR OPERATION

You can capture and analyze your field's performance by management zones. Then plan for next season with your harvest data integrated with your planting solution.

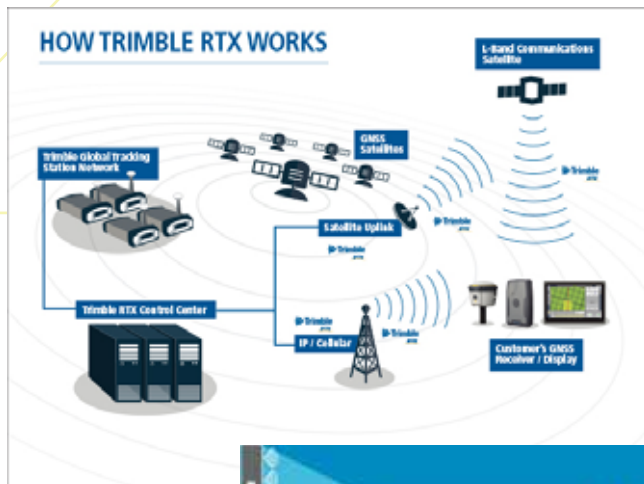
- Measure flow in the right place
- Forget recalibrations
- Consistent paddle shape



## YIELD SENSE



# MAPS PRODUCT GUIDE



## TRIMBLE

### RANGE POINT RTX

Affordable, broad accuracy correction service built on Trimble's exclusive RTX technology, providing < 50 cm repeatable accuracy via satellite or cellular delivery worldwide. Agriculture customers can achieve 15 cm (6") pass to pass accuracy.

### CENTER POINT RTX

CenterPoint® RTX, Trimble RTX's premier correction service, provides accuracy better than 4 cm (1.5") via satellite or cellular. No other satellite delivered correction service performs better.

Achieve greater productivity in the field when planting, spraying or spreading. High accuracy, Trimble CenterPoint RTX, can reduce overlap by 90% - 95%.

### RANGEPOINT & CENTER POINT RTX FEATURES

- Ideal for broadacre applications like spraying, spreading and cultivation
- Quick Initialization to full accuracy in less than 5 minutes
- Multi-constellation support: GPS, GLONASS and QZSS enabled
- More uptime: Continue working through correction signal interruptions for up to 200 seconds
- No base station required: No need to worry about losing radio signal reception since a base station is not needed for Trimble RTX-based correction services

## TRIMBLE

### xFILL

Trimble xFill runs seamlessly in the background automatically bridging the gap if a users RTK or VRS correction source is interrupted due to cellular signal disruption or loss of radio connectivity.

- More Uptime: Continue working through signal outages with centimeter-level accuracy using Trimble xFill, minimizing work delays and improving in-field productivity
- Standard xFill: Free for the first 5-20 minutes (application dependent) after the loss of an RTK correction source on all compatible devices
- Enhanced xFill: Works indefinitely on the Trimble R10 GNSS System, Trimble NetR9 Geospatial receiver and Trimble R9s GNSS receiver with a CenterPoint® RTX subscription
- xFill Premium: Works indefinitely on the Trimble AG-372 and Trimble TMX-2050 display with an xFill Premium subscription.

### VRS NOW

VRS Now™ provides instant access to real-time kinematic (RTK) corrections utilizing a network of permanent (fixed) continuously operating reference stations.

- High Accuracy: Provides < 2 cm (1") accuracy
- Ideal for a variety of industries needing high precision including survey and construction, mapping and GIS, cadastral, utilities, transportation and areas having good cellular coverage
- Instant Initialization: Start working immediately under optimal conditions
- Multi-constellation support: GPS and GLONASS enabled
- More uptime: Built-in redundancy to ensure connectivity, consistency and quality
- No base station required: No need to worry about losing radio signal reception since a base station is not needed for Trimble VRS Now based correction services

# MAPS PRODUCT GUIDE

## OmniSTAR.



OMNISTAR

### ACCURATE AND RELIABLE POSITIONING SERVICES

OmniSTAR provides differential GPS and GNSS services through a worldwide satellite service, making it easily available and very reliable. The use of real-time satellite correction services optimizes the capabilities of your GPS or GNSS receiver to ensure reliable, precise and accurate global coverage.

Ideal applications include:

- Planting
- Automated Steering
- Seeding
- Yield Monitoring
- Farm Mapping
- Soil Sampling
- Variable Rate Applications
- Spraying
- Harvesting
- Aerial Applications
- Yield Mapping



## TERRASTAR™

TerraStar precise positioning in agriculture can minimize costs and maximize yields through improvements in operational efficiency. Embedded into cost effective compatible receivers, TerraStar provides decimetric accuracies at high update rates for planting, spraying, yield mapping, soil sampling, crop walking, vehicle guidance, and farm asset management.

The range of modern sensors and technology now available to farmers requires precise positioning to achieve optimum performance and to gain the greatest operational benefits. Spraying is a typical application where high quality positioning helps prevent skip and overlap with accurate guidance and the ability to selectively activate sprayheads, allowing correctly targeted variable rate application, all contributing to better profitability with lower inputs and less environmental impact.

TerraStar capabilities are embedded into several compatible GNSS manufacturer's receivers, directly providing decimetric and metric positioning accuracies for agriculture applications.



BEACON v3.0



### FARM BUILT. FARM TESTED. FARM READY FOR YOUR FIELDS

Seamlessly stream RTK data into any receiver (including John Deere SF3000) without the need for cables. Simply plug the Beacon v3.0 into your receiver, program your login information into the DigiFarm app on your tablet, and hit connect. Within seconds you will be streaming RTK data directly to your receiver. It's that simple!

The Beacon v3.0 is a ruggedized device that enables a wireless Bluetooth connection between GPS/GNSS receiver and a Bluetooth enabled tablet. The DigiFarm NTRIP app supports the iPad, Android and Windows devices. This bridge allows RTK corrections to be passed through the smart device, eliminating the need for additional data plans, radios, or costly RTK base stations.

#### ADVANTAGES

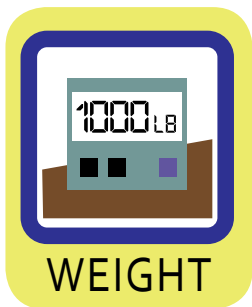
- Use a device that you already own and may already be paying a data plan
- No need to purchase expensive radios or base stations
- Cost effective
- Very fast installation

#### KEY FEATURES

- Stream RTK through iPad using NTRIP app
- Class 1 Bluetooth device
- No cables for Trimble devices
- Adapter cables for all other brands
- Ruggedized and weather resistant
- Also works with Android and Windows devices

The Beacon v3.0 is the industry's first and ONLY Bluetooth device to be MFi (Apple) certified to stream RTK data using a cellular-capable iPad to all major brands of GPS rovers. Because it's certified by Apple, we are able to use high power class 1 Bluetooth to optimize communication performance between the Beacon and iPad. Devices that haven't been through this certification run the risk of limited bandwidth, interrupted data flow, and reduced operating range.

# MAPS PRODUCT GUIDE



GT-560 | Scale



ST-3400 | Scale



NT-460 | Scale



GT-560

## EASY TO USE, HANDS FREE, HARVEST TRACKING SYSTEM

The GT-560 is a precision weighing and management system specifically designed for grain cart harvesting applications.

- Compare individual fields, soil types, seed hybrids, fertilizer types, tillage equipment and methods
- Know the exact weight of grain going into and coming out of on-farm storage
- Keep your road loads legal weight
- Measure crop damage for insurance documentation
- Can be calibrated to "Elevator Scales" when need for maximum accuracy
- Weighing in the field vs. hauling to a platform scale

ST-3400

## AUTOMATED SEED WEIGHING SYSTEM

SeedTracker measures seed used between farms and partnerships and allows you to manage multiple farms with downloadable information.

- Preset weights with pre-programmable auto shut-off
- Accurately know weight of remaining seed in bins
- "FIELD" button for viewing and changing the 6 character alphanumeric data field
- Accumulation of weights per field entry, scale always resets to the last preset entered weight for each hopper load
- Seed Tender Navigational keypad to review previous loads or edit field information

NT-460

## SPREADER SCALE SOLUTIONS

No need to remember to push the Start/Stop button when unloading your spreader. The NT-460 features AutoLog, and it is done automatically, no matter who is operating your spreader.

- Indicator displays actual tons/acre
- View and react to tons/acre reading by speeding up or slowing down
- View and change the 26 character field name and the 6 character ID
- Software to create custom reports
- Calculating the nutrient value of your manure is easy with scales on your spreader
- Nutrient Tracker software for simple record keeping

## DIGISTAR FEED MANAGEMENT

**TMR TRACKER** A full-featured Windows® based feed management system that offers operators additional management tools including: operator control, pen review, online feed data exchange with nutritionists, ingredient tracking and numerous reports.

**MOISTURE TRACKER** The Moisture Tracker is a handheld, Near-Infrared (NIR) scanning device, which rapidly measures the dry matter. It provides livestock producers with near instantaneous, accurate dry matter and moisture readings which enable livestock producers to quickly react to changes in dry matter thus ensuring that the ration delivered matches the ration calculated.

**BEEF TRACKER** Beef Tracker works in conjunction with the scales on your feed mixer wagon/truck and allows you to accurately and easily collect and manage feedlot nutrition.

**FEED MIXER SCALES** Scale indicators for animal feeding.

**RF DATALINK** RF DataLink software automatically manages the transfer of Cattle Feeding your feeding information and the RF DataLink software continuously looks for pen-fed data and feeding vehicle readiness to receive the next ration and/or pen feeding information.

# MAPS PRODUCT GUIDE



## SMS

### PLAN, MANAGE, PROFIT

We understand that smart management decisions are a must in your precision farming operation. And, because you may have data from different systems and sources, we aim to support as many data types as possible.

### SOLUTIONS FOR ALL SEASONS

- Field Stewardship
- Planting
- Application
- Harvest

### SMS BASIC

SMS Basic helps you to take data from your field and turn it into smart management decisions, using information gathered from planting through harvest. In a grower/consultant relationship, SMS Basic works in conjunction with SMS Advanced providing even more sophisticated and powerful analysis.

### SMS ADVANCED

SMS Advanced assists you in managing information across many acres, fields and operations. It's ideal for farmers looking for more sophisticated analysis tools and consultants who are working with multiple clients. It includes all of the features of SMS Basic, plus additional tools and features designed to make analysis across multiple fields and operations easy.

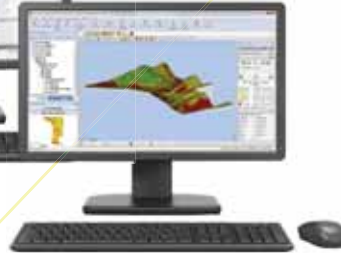
### SMS MOBILE

SMS Mobile allows you to collect in-field information such as crop-scouting, soil sampling, boundaries and more. It offers flexibility to work with most desktop software solutions, as well as syncing seamlessly with SMS Basic and Advanced. Information gathered from SMS Mobile can provide the extra detail needed to make critical management decisions.

### SMS | Basic



### SMS | Advanced



### SMS | Mobile



## AGFINITI

### CONNECT YOUR WHOLE OPERATION

Seamlessly access your maps and reports from any mobile device without having to learn a dedicated farm management software. Your maps and reports are available with or without an internet connection, and without any complicated processes. Simply open the AgFiniti cloud based portal or the AgFiniti Mobile app and have access to your information! AgFiniti. Your data, when and where you need it.



### INTELLISLOPE

Ag Leader's Intellislope® simplifies the process of installing field drainage tile by using an RTK GPS receiver to install tile with a positive grade through the entire run. This eliminates the need for laser surveying equipment, which can be subject to weather conditions, and adjustments to keep the plow on grade in changing topography.



# MAPS PRODUCT GUIDE



**DRONE SALES**  
**IMAGERY PROCESSING & TRAINING**  
**FAA REGISTRATION**

**PHANTOM 4 |**  
Advanced



**PHANTOM 3 |**  
Advanced



**PHANTOM 3 |**  
Professional

**PHANTOM 3  
ADVANCED**

## EXPERIENCE A NEW VIEW OF YOUR WORLD

The unique safety features let you set limits on your flight range and altitude and coupled with its easy to fly, intelligent flight system the Phantom 3 Advance is an ideal starter drone.

- 3 axis stabilization gimbal
- 2.7k video
- 12 mp camera
- Live HD view
- Easy to fly, intelligent flight system
- Powerful mobile app
- Worry-free auto pilot
- Four pairs of propellers
- Max flight time 23 min.
- Operating temperature 32° to 104° F

**PHANTOM 3  
PROFESSIONAL**

## EASY TO SET UP AND EASY TO FLY

The Phantom 3 Professional is capable of shooting spectacular 4K video at up to 30 frames per second.

- 3 axis stabilization gimbal
- 4k video
- 12 mp camera
- Live HD view
- Easy to fly, intelligent flight system
- Powerful mobile app
- Worry-free auto pilot
- Four pairs of propellers
- Max flight time 23 min.
- Operating temperature 14° to 104° F

**PHANTOM 4  
ADVANCED**

## VISIONARY INTELLIGENCE

Revolutionary materials and enhanced agility with multiple flight modes.

- Precision hovering
- 3 axis stabilization gimbal
- 4k video
- 12.4 mp camera
- Live HD view
- Intelligent flight system
- Powerful mobile app
- Worry-free auto pilot
- Four pairs of propellers
- Max flight time 28 min.
- Front optical sensors
- 3.1 miles control range
- Operating temperature 32° to 104° F

*Sentera drone sensors deliver unrivaled performance and consistently beat competitors in price, quality and function. Our sensors produce high-quality, context-rich color and near-infrared image data to deliver unsurpassed NDVI data to growers. Our state-of-the-art design and deep base of field experience enable us to produce sensors that deliver meaningful and actionable insights to our customers.*

### THE SENTERA SINGLE (NDVI)

An elegantly engineered drone sensor, specifically designed to monitor crop health through NIR / NDVI data collection. The Sentera Single Sensor is unmatched in its performance due to its global shutter, tiny size and light weight. It's the world's best tool for farmers to collect NDVI data.

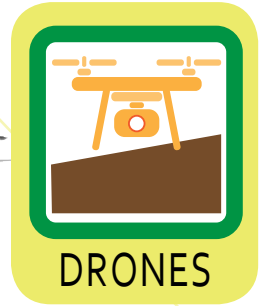
### THE SENTERA DOUBLE 4K

In agriculture, the Sentera Double 4K allows for both NDVI and RGB imagery in a single flight. In inspection applications, the cameras may be configured with narrow and wide field-of-view lenses.



# MAPS PRODUCT GUIDE

The DJI Drones come with manufacturer's camera as listed. MAPS offers Sentera Sensors for agricultural imagery. Contact a MAPS professional to determine which systems are right for your applications.



**MAVIC | Professional**



**INSPIRE 1**



**INSPIRE 2**

## MAVIC PRO

### PORTABLE YET POWERFUL

The Mavic Pro is your personal drone, ready to go with you everywhere. It's compact size hides a high degree of complexity that makes it one of DJI's most sophisticated flying cameras ever.

- 27 minutes flight time
- 4.3 miles control range
- Speed of 65 km/h
- 3 axis gimbal
- 4K video resolution
- 12mp camera resolution
- Operating temperature 41° to 104° F



## INSPIRE 1

### HOLD THE FUTURE IN YOUR HANDS

Designed to be powerful while lightweight, flexible while providing the stability you need, the Inspire 1 is DJI's most advanced complete package. All of the latest aerial technology is packed into one simple, ready-to-fly system, putting you in the sky within minutes.

- 27 minutes flight time
- 4.3 miles control range
- Speed of 65 km/h
- 3 axis gimbal
- 4K video resolution
- 16mp camera resolution
- Operating temperature -10° to 40° F

## INSPIRE 2

### POWER BEYOND IMAGINATION

The Inspire 2 takes everything that is good about the Inspire 1 and improves it.

- 27.7 minutes flight time
- 4.3 miles control range
- Speed of 67 mph
- 360° rotating gimbal
- 5.4-4K video resolution
- Live View 1080p
- Sensory range of 30 miles
- Dual battery system for prolonged life
- Magnesium aluminum composite shell
- Detects obstacles up to 30 meters ahead
- Operating temperature -4° to 104° F

## THE SENTERA QUAD

The Sentera Quad Sensor is the latest in precision agriculture drone cameras. With its ability to see three specific bands of light + capture full RGB photography, the Quad can measure key indicators of nitrogen + chlorophyll in crops. The intelligence provided by this sensor will revolutionize how growers plant and fertilize their crops.



## THE EO / IR

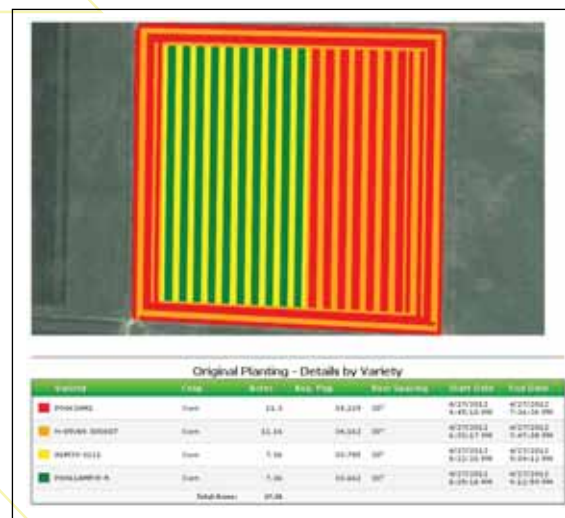
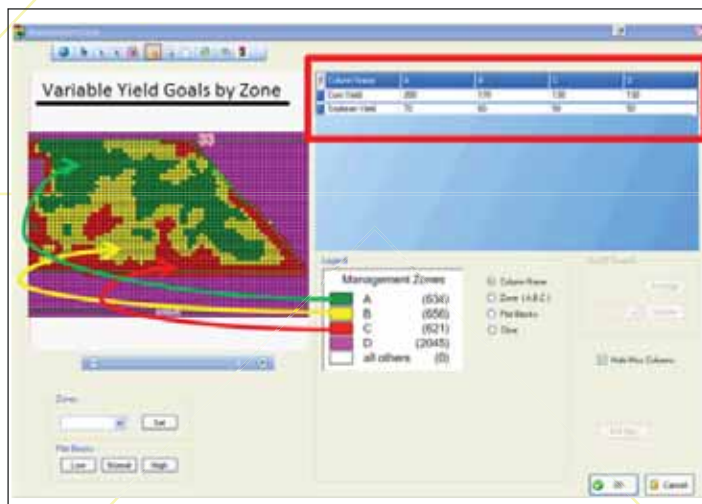
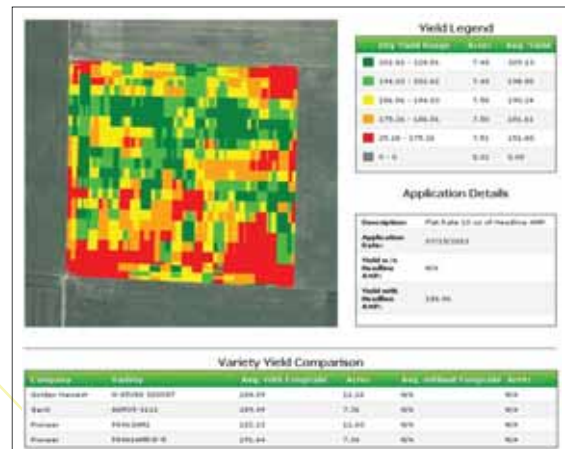
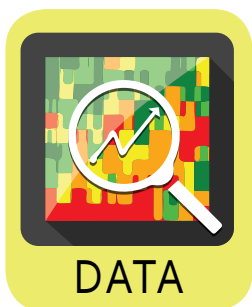
Proven in the harshest environments, the EO / IR drone camera payloads set a new standard in drone-delivered HD and thermal infrared video. Fully gimbal-stabilized, these drone cameras provide rock-steady live video from above, day or night.



## THE SENTERA Q

The Sentera Q Sensor provides highly accurate aerial imagery and data in a single pass, making it the ideal sensor solution for surveying, mapping, surveillance, and reconnaissance operations.

# MAPS PRODUCT GUIDE



## DATA MANAGEMENT

### USE OF YOUR DATA COLLECTED IN THE FIELD FOR RECOMMENDATIONS

MAPS Data Management (MAPS DM) allows producers the ability to enhance their decision making through complete understanding of their fields by compiling and analyzing multiple years worth of field data. Data Management users able to combine planting data and yield data as well as soil sample analysis information to create fertility recommendations or planting scrips as well as generate reports such as Yield by Variety by Soil Type by N applied across a single field or farms. Yield by hybrid is a starting place for a conversation with a grower but when using SOILMAP DM you can provide more in depth reports such as Yield by Hybrid, by Soil Type, by Test Value, by Seed Trait, by Population, by Rainfall and by N applied.

- Create seed recommendations
- Create fertility recommendations
- Create management zones
- Used previous yield data to create recommendations

Perform advanced analysis reports

- Field planting reports
- Field harvest reports
- Benchmark reports

# MAPS PRODUCT GUIDE

## AGRONOMY DECISIONS

The next step in the MAPS program is developing site-specific nutrient recommendations based on sound agronomic principles. A professional agronomy staff, with practical experience, is key to gaining quality solutions. MAPS methods for managing fertility have been field-tested for over a decade, and each recommendation and decision is customized for your individual grower needs.

Field soil results and staff will assist with commodity and hybrid selection, along with correct fertilizer applications in the spring; followed by fertilizer and tillage practice recommendations through the summer and fall.



## SERVICE & SUPPORT

The most important piece of any agronomic tool is also the most commonly overlooked by other providers. However, the MAPS team has made it their commitment to see that our customers receive the total precision package.

Along with professional soil sampling, data software, numerous hardware products, and accompanied by efficient applications options, the MAPS team offers Professional Consulting Services.

Our consultants can help guide your precision needs and grow your business and improve your work flow processes and accountability.



## APPLICATION & OPERATION

Once all the data is collected, recommendations are made and hardware is purchased, it is the actual application that determines the outcome of MAPS tools and solutions.

You will achieve input efficiency through options in variable rate application of fertilizers and other nutrient inputs, along with controlled planting operations to ensure that time and money are not wasted.

Coupled with guidance and steering tools, you will see a positive change in the fuel consumption, machine hours, labor and input costs, and in the amount of skip and overlap, in comparison to your previous operations.



# PUT the POWER of FARMING in YOUR HANDS!

Contact one of these  
MAPS Hardware Specialist  
for more information.

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515-570-0775

## MITCH ADEN

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515-570-7058

## CODY RUBENDALL

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515-291-1652

## CARL DEWALL

AGRONOMIC TECHNOLOGY SPECIALIST  
cdewall@newcoop.com  
515-571-5209

AUTHORIZED  
DEALER FOR THE  
FOLLOWING:

*Dakota Micro, Inc.*  
LEADERS IN INDUSTRIAL CAMERA TECHNOLOGY

**Ag Leader**  
Technology

**BLUE DELTA**  
DEALER • ELITE • PRECISION AGRICULTURE

**CopperheadAg** PRODUCTS

**DIGI★STAR**  
— TOPCON POSITIONING GROUP —

**DigiFarm**  
Virtual Base Network

**HEADSIGHT INC.**  
HARVESTING SOLUTIONS

**Martin-Till**

**OmniSTAR**

**NORAC**  
— TOPCON POSITIONING GROUP —

**Precision**  
PLANTING

**PRECISION Ag**  
TECHNOLOGIES

**TERRASTAR™**

100% CUSTOM PARTS  
**TOTALLY TUBULAR**  
MANUFACTURING  
EST. 2001

**TOPCON**

**360** YIELD  
CENTER



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