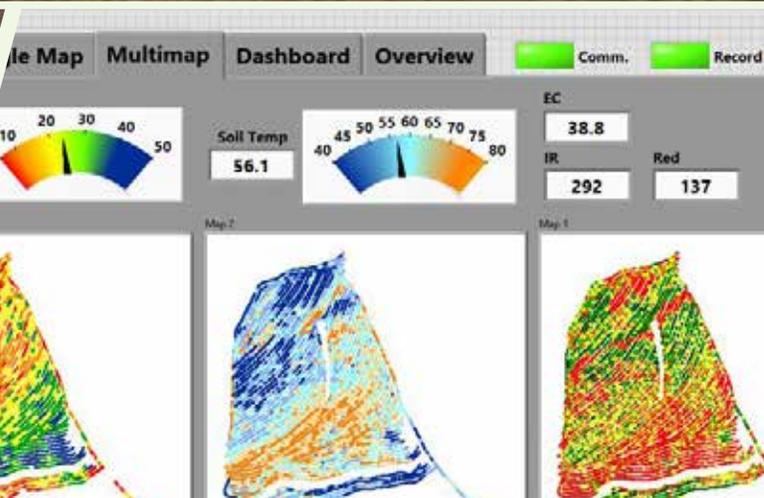
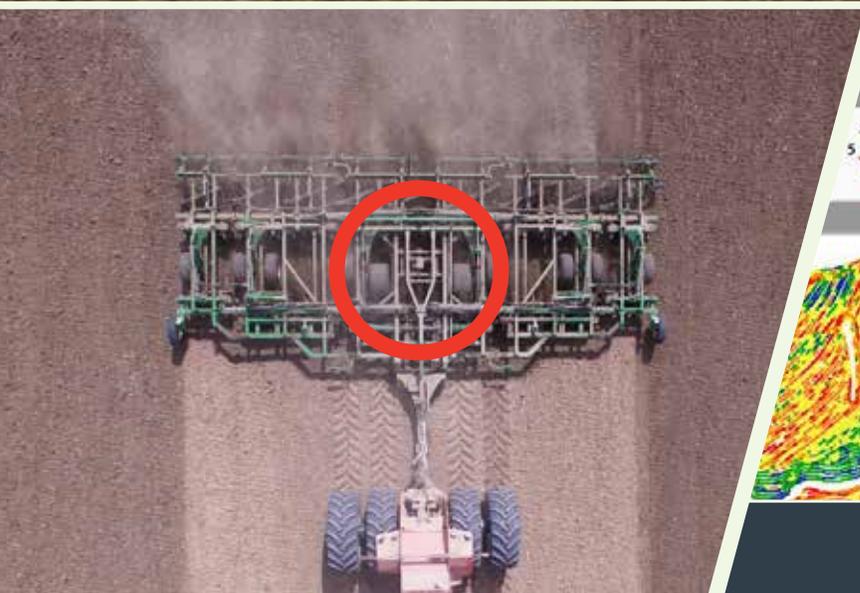




TRUEVIEW™

New TrueView technology from Great Plains uses innovative soil sensors to access accurate, real-time field data and variances, including soil moisture, soil temperature, organic matter, and soil texture (electrical conductivity). This data identifies unique

soil management zones, which helps the grower perform customized, critical operations related to tillage passes, optimum planting conditions, seed rates, precise soil inputs, and more, for maximum efficiency and profits.



CAPABILITIES



Electrical conductivity is one of the ways to identify soil types, as each type conducts electricity differently. TrueView uses electrical currents that pass between the sensor and the coulters to measure these variations in soil type and texture.

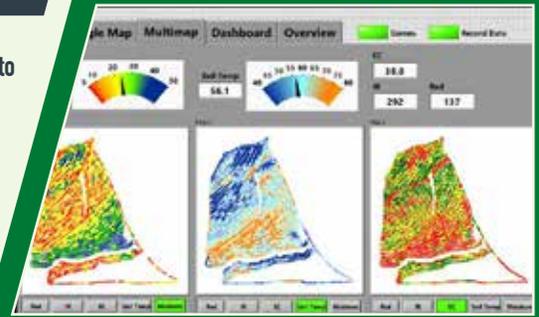
USE TRUEVIEW TO MEASURE:

- 1. Soil Moisture:** TrueView measures soil moisture using a capacitance sensor, which is the same sensor commonly used for measuring water in the soil profile for irrigation scheduling. Knowing real-time soil moisture content in the field can help aid the operator in making consistent on-the-go tillage adjustments, such as tillage depth, gang angle, or basket down-pressure, all of which can help create the most agronomically sound seedbed.
- 2. Soil Temperature:** Soil temperature is measured at the depth of tillage and, when used during a final seedbed preparation pass, can help identify field suitability for planting. Soil temperature can fluctuate, depending upon the amount of residue on the surface and with the soil texture and moisture content. Measuring and mapping temperature as tillage is performed provides one more data point to help producers make the most informed planting decisions.
- 3. Soil Electrical Conductivity (EC):** Soil texture is measured using an electrical conductivity array. Fine-textured soils conduct better than coarser soils, giving an accurate depiction of the soil's texture. EC arrays penetrate throughout the rooting zone, giving producers a profile view of the soil properties across the field.
- 4. Soil Organic Matter (OM):** Soil OM is mapped using infrared soil optics. Soil OM is what gives soil its color or darkness. Darker soils contain more organic matter than lighter soils. Organic matter, combined with soil texture, gives accurate insights to soil differences throughout a field. The soil's water-holding capacity, nutrient-holding capacity, and compaction potential are just a few of the agronomic impacts of inherent soil properties.

Available on Turbo-Max®
1800TM, 2400TM, 3000TM,
3500TM, 4000TM, 4800TM



FEATURES & BENEFITS



ACCURATE, REAL-TIME SOIL DATA

Producers can look at real-time soil data to make immediate tillage adjustments, such as depth, gang angle, and wing down-pressure, as soil conditions change. When paired with Implement Command™, some additional adjustments, like wing down-pressure, can be made on-the-go from the tractor cab.



PORTABLE & INSTANT DATA ACCESS

Each TrueView package comes with a tablet for portable and immediate data displays. The tablet is capable of wi-fi and hot-spot connectivity for uploading data to FieldFusion™ and transferring to other cloud-based, precision ag platforms.



DURABLE & PRECISE SENSORS

Sensor wear components have been developed to withstand field conditions and provide high-quality performance. One replacement module is included and additional replacements can be purchased through Great Plains.



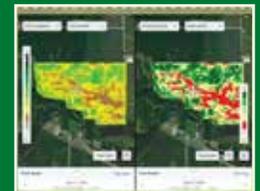
DATA-DRIVEN DECISIONS

Use soil texture (EC) and organic matter maps to help develop specific management zones within fields. This data can be combined with harvest yield maps to depict field variations more accurately for enhanced management decisions related to variable-rate fertility and seeding rates.



USER-FRIENDLY INTERFACE

The SoilViewer interface allows users to easily switch between information tabs and access real-time field maps with the touch of a button.



PRESCRIPTION MAPS

Users can submit field data to the Cloud, and with an optional per hectare fee, purchase a professionally-interpreted soil zone map and utilize easy-to-use prescription writing tools.



CONTROL BOX

The control box gathers and analyzes all sensor data and relays it to the tractor cab for display.



ELECTRIC MOTOR

A linear actuating electric motor raises and lowers the unit for optimal depth adjustment or to raise it out of the way when not in use.



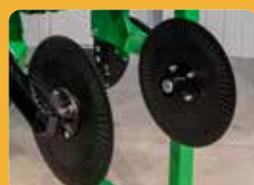
BOLT-IN APPLICATION

The entire TrueView module quickly bolts into place on the center frame of the Turbo-Max®.



HEAVY-DUTY SPRINGS

Down pressure is adjusted by increasing or decreasing the spring tension on two heavy-duty springs.



FLUTED COULTERS

Fluted coultter blades feature a proven coultter design that cuts residue in front of the sensor modules.



ORGANIC MATTER SENSOR

A dual-wavelength optical sensor is used to measure organic matter below the soil surface, which helps ensure accurate readings.



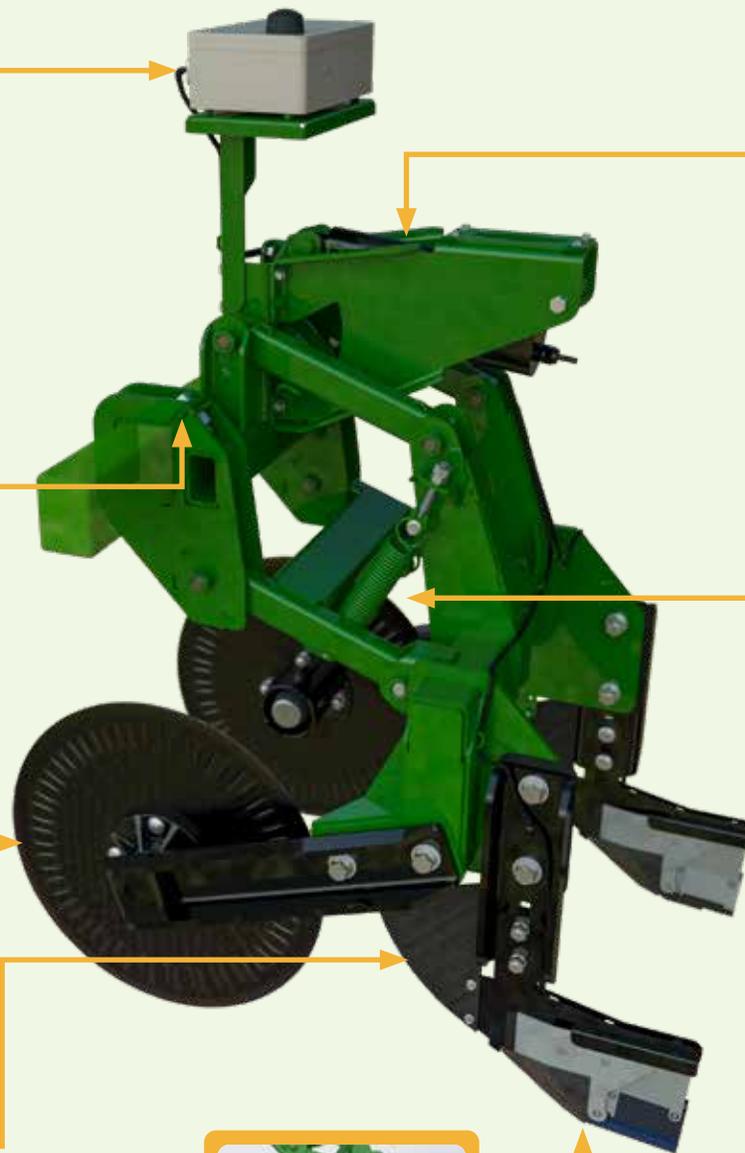
TRASH SHIELDS

Rounded metal shields protect sensors and allow trash to flow around the sensor modules.



MOISTURE & TEMP SENSOR

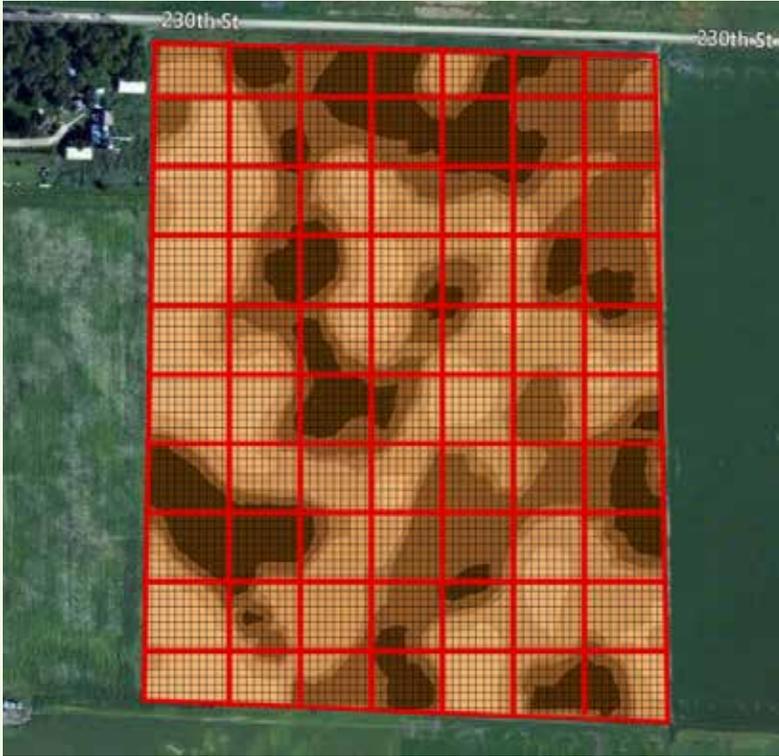
Soil moisture is measured with capacitance sensing, as well as soil temperature with a thermopile sensor.



CONDUCTIVITY SENSOR

Soil texture is measured using an electrical conductivity array, giving producers a profile view of the soil properties across the field.

ONLY AVAILABLE AT GREAT PLAINS



PRESCRIPTION MAPS

The soil grid on the left demonstrates the importance of being able to adapt and customize field inputs. Each red square represents a standard sampling grid of one hectare. A map created using TrueView technology allows you to change inputs based on the width of your planter as represented by the black squares!

Because many soil types may be present throughout each hectare, a producer working from these traditional sampling grids may unknowingly apply the wrong input on a particular soil type. When working from a prescription map created by TrueView, producers can monitor and change inputs more precisely to match their soil management zones.



Map and manage field variability with TrueView soil electrical conductivity and organic matter sensing technology. Below are just a few examples of the site-specific management practices that can be adopted with TrueView soil sensing.

Variability Management	Site-Specific Management Objective	Soil Influence
Seed Population	Match seed population to a soil's productivity	Plant higher populations in soils deemed highly productive (i.e., soils with higher water-holding capacity or areas with nominal topography); reduce populations in lower-producing areas of problematic soil
Nitrogen	Adjust applied N to account for needs and natural supply through mineralization	Each 1% of organic matter mineralizes 9-13.6 kg of N during the season; incorporating this N credit and inherent yield goals allow optimal N rates and timing
P, K and other Nutrients	Determine nutrient needs from soil samples	Choose sample locations based on each area of the field with different nutrient usage, loss, and storage potential
Irrigation Water	Determine water-holding capacity	TrueView guides the prescription for the variable-rate pivot to match water rates to soil capacity
Nematicides	Identify how soil environment affects nematode activity	TrueView identifies areas of higher nematode populations

