CropSpec

Crop Monitoring Technology





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 X35 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.

Maximize yield potential

Reduce inputs through ideal application

Crop tailored functionality

On-the-go capability

Year-over-year analysis

Largest footprint in the industry

On-the-Go Crop Canopy Sensor



Specifications	
Dust/water rating	P67
Laser safety	Class 1 or Class 1M
Dimensions	200 x 80 x 80 mm
Mounting height	2 - 4 meters
Viewing angle	45° - 55°
Operating Temp	0-60°C
Operational wavebands	730-740 nm and 800-810 nm
Supply voltage	10-32 VDC
Supply current	2A

Just-in-time crop management

CropSpec is a real-time integrated crop monitoring and application system. Operating with the variable rate control (VRC) program, MapLINK, or any Topcon application controller, CropSpec allows users to monitor in-field variability, treat on the go, or keep data for future analysis and/or prescription application.

Compatible with Topcon X25, X30, and X35 consoles, CropSpec can be used in single- and dual-sensor configurations. The sensors mount on the cabin roof, out of harm's way with less potential to damage crops or equipment. With the largest footprint in the industry, it produces the most accurate readings and prescription applications. The system uses pulsing laser diodes for sensing, measuring plant reflectance to determine chlorophyll content, revealing nitrogen concentration. Through crop-specific, tailored analysis and algorithms, CropSpec offers the ideal application to maximize yield. Its non-destructive, non-contact method provides accurate, stable readings and repeatable values.

CropSpec features three different modes of operation:

Read and Record - Read and record data for analysis and creating prescriptions. Scanning the crop creates a map to indicate nitrogen levels, including nitrogen rich and deficient areas. This information can be used to construct a variable rate prescription application to be used immediately or at a later date. Perform relative crop monitoring over time or create application programs based on health stages.

User Determined Rate Control - Hi/Low Basic mode: with a simple two-point calibration, the user can set high and low points, then perform actual on-the-go application using field averaging. Target rate can be determined by the user.





