

Topcon Harvest

Sugarcane Yield Monitoring



Get accurate, real-time yield visibility to maximize harvester efficiency, optimize logistics, and drive precision agronomy.

Learn more at topconpositioning.com

 **TOPCON**

Tired of unreliable optical sensors that go blind in the dust? In the high-volume world of sugarcane production, logistics and efficiency are everything. With tight harvest windows and massive biomass to move, you cannot afford to rely on guesswork or historical averages. The Topcon Sugarcane Yield Monitoring solution establishes a new standard for accuracy, turning your harvester into a powerful data collection tool.

Unlike alternative systems that rely on optical sensors which are easily obstructed by dust, mud, and trash, our solution utilizes a patented hydraulic pressure sensing method. By measuring load pressure, we are able to calculate highly accurate yield data. This provides a ground-truth measurement that remains consistent in the harshest conditions, day or night.

- » **Patented Hydraulic Sensing:**
Measures load pressure for superior, unwavering yield data accuracy.
- » **Reliable Performance:**
Completely unaffected by dust, moisture, or changing lighting conditions.
- » **Universal Compatibility:**
OEM-agnostic design works with virtually any sugarcane harvester make or model.
- » **Seamless Integration:**
Connects directly with Topcon X-family consoles and our easy-to-use farm management software, the Topcon Agriculture Platform (TAP).



Optimize Logistics

Improve harvest planning, trailer coordination and mill delivery forecasts.



Data-Driven Agronomy

Optimize production with precise yield mapping. Turn field data into actionable variable rate prescriptions.



Maximize Efficiency

Optimize ground speed and pour rate in real-time.



Proof of Performance

Provide transparent, accurate data for contracting and billing. Arm your operation to counter conflicts.

Streamline Harvest Logistics

Plan and queue sugarcane trailer and transfer truck movements using live data. Eliminate field bottlenecks and keep harvesters running at maximum capacity.

Enable Precision Agronomy

Generate prescription maps for variable rate application (VRA) of fertilizer and soil amendments based on actual output, not field averages.






Increase Efficiency Through Actionable Data

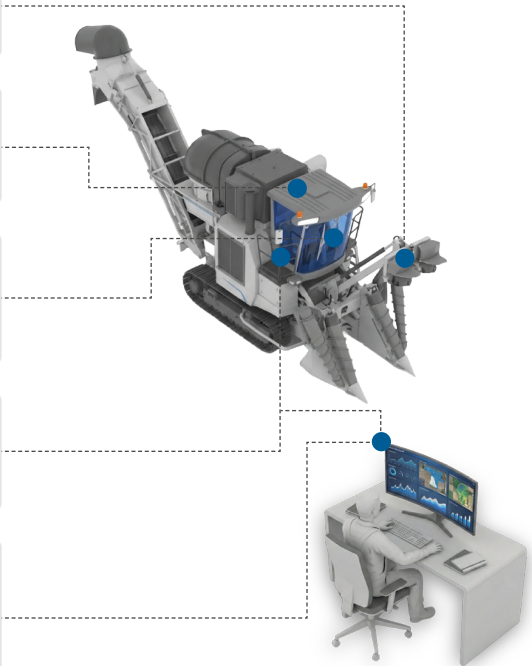
Monitor real-time feedback to adjust ground speed, maintain a consistent pour rate, prevent high trash levels, and optimize fuel consumption.

Effortless Data Flow, Empowered Workforce

Simplify precision tasks for your entire workforce with intuitive controls that require minimal training. Enjoy effortless data transfer to TAP, empowering operators, logistics coordinators and analysts to work more effectively.



- 
Hydraulic Pressure Sensor
 Precise pressure sensor measuring load pressure which correlates to yield.
- 
GNSS Receiver
 Reliable GNSS receiver mounted on harvester roof for precise position data.
- 
Controller and Optional Data Transfer
 Rugged ECU installed into harvester to coordinate data collection with optional cellular data transfer.
- 
Console, Operating Software and Data Transfer
 Clear touchscreen console and intuitive operating software with live mapping. WiFi or USB data transfer.
- 
Data Transfer and Analysis
 Easy data transfer via console or automatic data transfer via cellular device. Uploaded to farm management software.



Built for the Reality of the Cane Field

The Topcon Sugarcane Yield Monitoring solution is a complete ecosystem of rugged hardware and intuitive

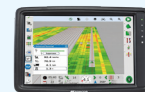
software, designed specifically for the demanding conditions of corporate sugarcane operations.



Pressure Sensor | Yield Measurement
 We utilize advanced hydraulic pressure sensors instead of easily compromised optical lenses, delivering highly accurate yield data with zero maintenance and minimal calibration.



AGS-2 GNSS Receiver | Precise Positioning
 Reliable, high-accuracy GNSS coordinates flawlessly with your yield data. Operations know their exact performance at every specific point in the field to generate flawless, high-resolution yield maps.



XD Consoles | Interface / Visualization
 Available in 7" (XD) and 12.1" (XD+) touchscreen models, featuring our renowned Horizon operating software. Enjoy a modern aesthetic, unparalleled ease of use, and real-time visualization of yield and totals.



CL-55 Controller | The Coordinator
 A reliable ECU conveniently mounted in the cabin to coordinate data collection. With an optional data transfer unlock, it utilizes cellular connectivity to automatically upload yield data to TAP. Operational managers can track harvester locations in real-time, optimizing logistics by dispatching trailers at the exact right moment to eliminate downtime.



TAP | Seamless Data Transfer / Analysis
 An intuitive digital farm management ecosystem that automatically ingests your data, visualizes yield performance, and simplifies reporting. Efficiently create tailored prescription maps based upon yield and other agronomic data to optimize production.

The Topcon Advantage

We understand that sugarcane harvesting is one of the most abusive agricultural environments on earth. Your technology shouldn't just survive it; it should help you

master it. The Topcon solution is designed for maximum reliability, accuracy, compatibility, and value through connectivity coupled with complementary solutions.

Internal Hydraulic Pressure Sensor



No lens to go blind

Unaffected by grime or low light

Cane Elevator Optical Sensor



Lens encrusted with dust / debris

Erratic data, high maint.

Superior Accuracy | Hydraulic Pressure vs. Optical

Legacy systems rely on optical sensors to "see" the volume of cane in the elevator. In dusty, muddy, or low-light conditions, these lenses go blind, leading to erratic data, constant maintenance, and frequent cleaning stops. Our internal hydraulic sensors measure load pressure, ensuring consistent, high-accuracy data without the maintenance burden. It also eliminates reporting errors found in optical systems where cane stored in the machine during a row shift is incorrectly mapped to the new row.

Unmatched Reliability & Durability

Delicate components fail when exposed to the extreme realities of cane harvesting. Our system features a solid-state operational design with no exposed moving parts or fragile optical lenses in the material flow path. It is engineered to withstand vibration, while being far removed from debris and potential impact, guaranteeing maximum uptime.

Internal Hydraulic Pressure Sensor



Blockage resistant

Vibration resistant, solid state design

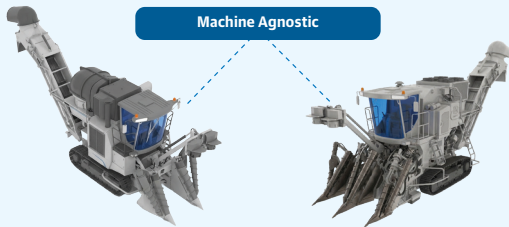
Cane Elevator Optical Sensor



Frail lens break on impact

Vibrations cause errors

Machine Agnostic

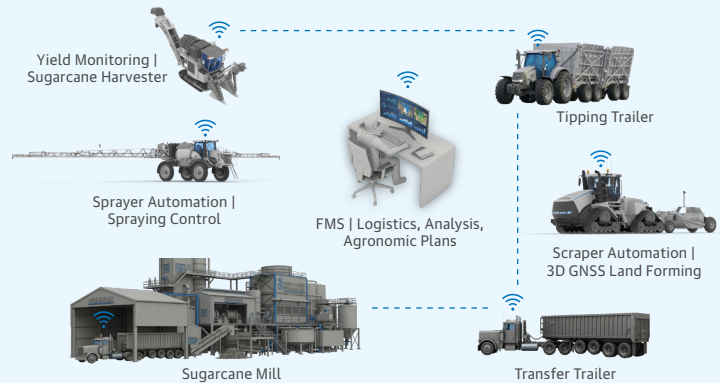


Universal Fleet Compatibility

Most yield monitoring solutions are vertically integrated and closed-off; they only work on the specific machine they came with. Topcon offers an OEM-agnostic yield monitor; whether factory-fitted via select partners or retrofitted aftermarket, our system works on any make or model. For corporate farms and contractors managing mixed fleets, we provide the single source of truth you need.

The Connected Ecosystem

Data that sits isolated on a cab display provides no strategic value to the broader operation. Our solution isn't just a sensor; it's an end-to-end workflow, connecting seamlessly with the Topcon Agriculture Platform (TAP). Yield data is easily uploaded, processed, and utilized to make better agronomic decisions including the ability to generate VRA prescriptions for application systems, optimize water management and more. With Topcon, experience a fully closed-loop agronomic cycle with corresponding implement automation solutions to get the most out of your fields.



Some images in this brochure were generated with the assistance of artificial intelligence.

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