Technology Solutions for McCormick Tractors
A Full Season of Solutions

Topcon Agriculture combines precision positioning technology and advanced machine control to increase productivity, reduce inputs and maximize farm revenue to virtually every phase of the farming operation.
Technology Solutions by Topcon Agriculture

In precision farming, the Global Positioning System (GPS)/Global Navigation Satellite System (GNSS) are standalone systems that are used in tractors. The key to any precision farming solution is the correct accuracy. GPS technology with RTK (Real-Time Kinematics) augmentation provides significant results. The GPS receiver determines the location and sends that information to the guidance system to create an accurate navigation path.

Whether you are after entry-level guidance or need sub-inch, repeatable RTK accuracy, Topcon modular-designed products let your GNSS technology grow as your operation expands.

With a proven track record of dependable and reliable products that stand up to the challenge of farm work, Topcon combines precision positioning technology and advanced machine control to increase productivity, reduce inputs and maximize farm revenue. In an effort to keep your farm operating throughout the growing season, dealers have access to 24/7 support from the factory.
Consoles

Multitouch X Family consoles

Topcon state-of-the-art, multi-touch guidance consoles bring industry leading performance and ease of use to any size farm, any type operator from entry-level to experts of precision and data.

The Topcon X Family consoles allow you to run your entire crop cycle from a single display. As your operation grows, the X Family can grow with you. From the compact X14 to the full-featured X35, all operate on the exclusive Topcon Horizon software, making it easy to scale up, bringing expanded range and functionality with each step.

X14 Console

4.3” entry-level color touch screen console

Designed for the entry-level user, X14 provides basic manual and auto-guidance functionality as well as one product section control.

X23 Console

8.4” color touchscreen console from Manual Guidance to Autosteering

A high-performance, 8.4-inch touchscreen console for entry-level needs. Designed as a low cost ISOBUS guidance display, the X23 comes standard with Topcon Horizon software, featuring the same easy-to-use farmer-friendly on-screen navigation menus, drag-and-drop mini-views and user configurable dashboard as the X25 and X35 consoles.

X25 Console

8.4” color touchscreen console for machine control and Autosteering

The X25 features the same farmer-friendly on-screen navigation menus, drag-and-drop mini-views and user configurable dashboard. It can simultaneously display 3 separate functions on-screen and offers ISOBUS compatibility. It allows adoption of precision farming practices into more operations to lower input increase machine automation, and enable higher operational efficiency. The X25 is available with feature packages that provide flexibility for virtually to any size operation.

ISOBUS – Integrated Compatibility
**X35 Console**

12.1” color touchscreen console
All-in-one Premium Console for Leading Control

A leading-edge computing device, X35 offers unmatched speed and screen definition allowing optimal positioning in-cab for user interaction. Keeping the Topcon modularity concept, the X35 provides a superset of the advanced features and capabilities of the mid-sized X25 and smaller X14 consoles. Horizon software pays it all off with high-levels of functionality and ease of use.

**ISOBUS Consoles X25 & X35**

The worldwide ISO 11783 (ISOBUS) standard defines the communication between agricultural machinery, mainly tractors and implements, and also the data transfer between these mobile machines and farm software applications. For increased transparency towards the user the AEF has defined AEF ISOBUS Functionalities that are now also the basis for the certification of ISOBUS products. Precise information about which functionalities are supported by an ISOBUS product or a combination is provided by the new AEF ISOBUS Conformance Test including an independent certification. Topcon X25 and X35 consoles has successfully passed the newly developed AEF certification process.

**Additional Horizon features**

**Horizon XTEND™** feature allows access to the X35 via smartphone or tablet inside or outside the cab. This means implement and calibration inputs can be accomplished without climbing up into the cab multiple times for inputting setup data. XTEND can streamline a typical two person setup of a complex air seeder down to a single operator.

**Remote Support** feature offers the time saving convenience of correcting issues on the fly. The operator does not even have to leave the cab. It allows technicians to diagnose issues and take over application for remote correction.

**XLinks** enables interface to a Topcon X Family console and an existing controller with basic functionality to maintain usability versus re-wiring the implement and installing a new control console.
Guidance

Results that show pass after pass. Guidance gets you on the path to increased productivity and higher yields with easy upgradeability as your needs grow

Perfect for lower input farming systems

Manual guidance provide visual guidance for the driver to follow, but does not control the steering wheel as in auto-steer systems. They are ideal for situations where lower levels of precision are required such as fertilising grassland, where there is not a requirement for higher levels of GNSS positioning accuracy. Manual guidance system consists of SGR-1 GNSS receiver for signal reception and an in-cab console.

SGR-1

SGR-1, featuring Topcon Tru-Pass advanced positioning technology

Teamed with the Topcon SGR-1 GNSS receiver, the X14 offers manual guidance and coverage mapping. Easy-to-use Horizon software on the full-color 4.3-inch color touchscreen displays moving map guidance and a virtual on-screen lightbar. The SGR-1 receiver features Topcon TruPass™ advanced positioning technology for higher, more stable pass-to-pass accuracies in dynamic AG applications.

Entry Level Guidance

Teamed with the Topcon SGR-1 GNSS receiver, the X14 offers manual guidance and coverage mapping.

Mid-Range Guidance

The X25 together with the Topcon SGR-1 GNSS receiver offers manual guidance and coverage mapping and much more. Easy-to-use Horizon software on the full-color 8.4 inch color touchscreen offers moving map guidance as well as a virtual on-screen lightbar. The SGR-1 receiver features Topcon TruPass™ advanced positioning technology for higher, more stable pass-to-pass accuracies in dynamic ag applications.
**Autosteering**

Real efficiency begins with autosteering

Steering systems use GNSS information to increase efficiency working across fields, avoiding overlaps and underlaps and operator stress of machinery working widths. Autosteering allows one tractor to do the work of two or three tractors, with continuous, round the clock operation. Auto-steer systems are typically made up of AGI-4, steering wheel and in-cab screen.

**AGI-4**

All in 1 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.

**Topcon Steering Technologies to fit your accuracy needs**

**AES-35 Electric Steering System**

Designed specifically for non-steer-ready and other specialty vehicles, the AES-35 provides a ruggedized, weatherproof system, fully capable in open-platform or non-cab environments. Compatible with a wide range of equipment, including tractors, sprayers, spreaders and combines, the AES-35 brings new flexibility in GPS autosteering to operations that do not use cabbed vehicles.

**Horizon headland turns option**

The latest Horizon 4.02 operating system’s Headland Turn function enables tractors, sprayers and combines fitted with a Topcon auto-steer system to make fully automated turns at headlands using alternating, infill and single direction infill patterns. Achieving results in real fuel and time saving, better implement management by eliminating gaps and overlaps, increased operator comfort and performance with significant increase in efficiency.

▶ **Option your tractor ‘Steer Ready’ and autosteer with only the addition of X console and AGI-4**