Raven Solutions

2025

R ravenind.com

RAVEN

Raven's Commitment to Service

At Raven, we believe in best-in-class customer experience. Our experienced service team is ready to assist you, and has the ability to perform remote support. We keep you going when it counts.

Helping Farmers Serve the World

Our enduring vision to feed a growing world population using innovative technology has never been more relevant. Farmers today are under constant pressure to produce more with less. To help growers maximize yields and ROI with less labor and economic resources, we are dedicated to advancing farming through technology and innovation.

Contents

Viper® 4+

Manage your fleet with intuitive controls.

Meet Viper 4+, the go-to in-cab display powered by the innovative Raven Operating Software.

With easy job set-up, fewer touches, and greater efficiency, Viper 4+ gives users extraordinary data management capabilities.

Specifications:

- 12.1" (30.7 cm) Capacitive touchscreen
- Two USB 2.0B ports for data transfer and device charging
- Ignition switch start-up and boot-down
- Integrated dual frequency GPS receiver
- 30 GB internal storage
- CE certified

Key Features:

- Horizontal or vertical orientation
- Sleek design with 12.1" capacitive touchscreen and intuitive, tablet-like interface and state-of-the-art rugged magnesium alloy enclosure
- 4 camera inputs for monitoring bin levels, blind spots, roadway operation, and more
- Faster boot-up time (approx. 10 sec.) and ignition switch start-up and boot-down
- Screen up to 3 times brighter with improved peripheral viewing
- Dustproof for tough environments
- Integrated, fully scalable GPS receiver
- Built-in Self-Test (BIST) capabilities
- Customization by user and machine
- Set up machine and product profiles
- ISOBUS compatible
- Wireless over-the-air software updates
- ISO VT with task controller capabilities
- On-screen implement location with section status

CR7® +

The lean, clean, cost-efficient machine

The CR7®+ is a 7" (17.8 cm) lightweight field computer with customizable job layouts. A simple widget concept with ISOBUS Universal Terminal (UT) and Task Controller capabilities make this compact unit an affordable, scalable plug-and-play system. The CR7®+ is compatible with Slingshot® file transfer and remote support, RS1™ and SC1™ autosteering, and more.
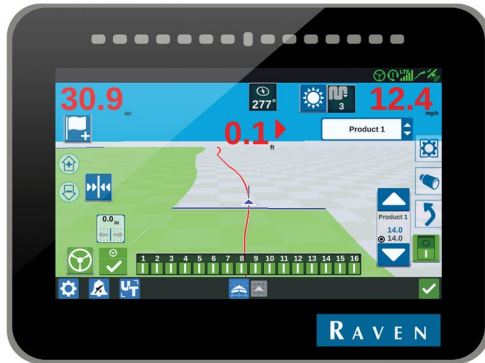
Specifications:

- 7" Capacitive touchscreen
- Integrated lightbar
- IP65 (Dust and splash proof)
- 7-36 VDC Input - 850mA
- 190 mm W x 140 mm H x 76 mm D
- Weight: 635 grams
- RAM mount
- CE and E-mark certified

Functionality:

- Simple, customizable user interface
- Isobus Univeral Terminal & Task Controller
- Map based navigation
- Operation Planning
- Boundary & guidance line options
- Customizable data structure
- Recommended for up to 2 product controls
- Slingshot® file transfer and Remote Support
- Slingshot® Over The Air Software Updates
- Quicker start up and response time
- Straight A-B, A+, Pivot, Contour, Last Pass Guidance, Multiline Guidance
- Faster internal processing capabilities

Four Distinct Mainscreens:
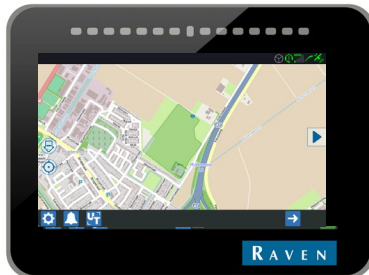
1 Start-up screen with map based navigation.

2 Easy to use settings page.

3 Guidance screen with customizable layout for every user and operation.
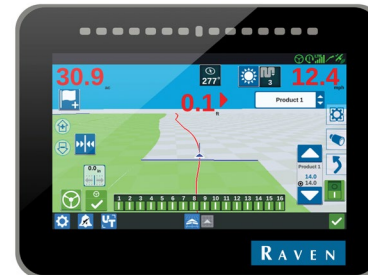
4 ISOBUS UT screen with integrated Task Controller.
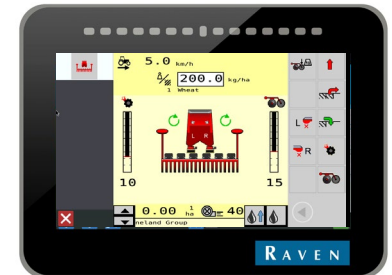
CR12®+

Knows your every row - especially on uneven terrain.

Uniquely, the CR12+ offers an extensive field and operations planning feature, allowing the user to define AB-lines and reference lines of the field boundary. The user can setup the complete field, including multiple headlands, spray tracks, greening zones and tracks with different working widths.

This powerful operating system features easy job set-up, fewer touches, and greater efficiencies, empowering the user with extraordinary data management capabilities. A simple widget concept, easily accessible settings, and ISO Universal Terminal and Task Controller capabilities make this mighty unit an affordable plug-and-play system. The CR12+ is compatible with Slingshot® file transfer and remote support, RS1™ receiver, boom leveling, Raven product control, and more.
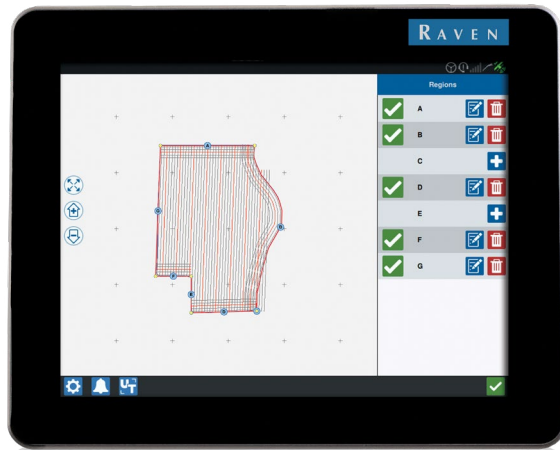
Specifications:

- 12.1" (30.7 cm) Capacitive touchscreen
- IP65 (Dust and splash proof)
- 4-35 VDC Input - Reverse polarity protected
- Built-in self test
- 30 GB internal storage
- RAM mount
- CE certified

Functionality:

- Simple, customizable user interface
- ISOBUS Universal Terminal
- Map based navigation
- Operation Planning
- Boundary & guidance line options
- Customizable data structure
- Recommended for up to 5 product controls
- Slingshot® file transfer and Remote Support
- Slingshot® Over The Air Software Updates
- Easy backup/recovery of the system
- Straight A-B, A+, Pivot, Contour, Last Pass guidance
- ISOBUS Universal Terminal and Task Controller.

Four Distinct Mainscreens:
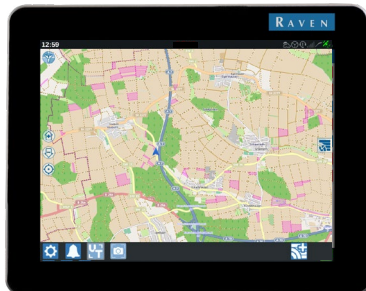
1. Start-up screen with map based navigation.

2. Easy to use settings page.

3. Guidance screen with customizable layout for every user and operation.

4. ISOBUS UT screen with integrated Task Controller.

Easily connect, command control, and improve every farming function

Total system control

Raven offers a choice of multi-function field computer displays to suit your operating needs. Easily improve virtually every farming function with command and control from Raven displays. Get more efficiency and yield potential with variable rate applications, auto-steering, automatic boom height and section controls, GNSS-guided on-off planter controls, record keeping, mapping, and wireless communications.

	VIPER® 4+	CR7®+	CR12®+
DISPLAY FEATURES			
Screen size	12.1-inch (30.5 cm)	7 inches (17.8 cm)	12.1 inches (30.5 cm)
Resolution	1024 x 768	800 x 400	1024 x 768
Ratio	4:3	16:9	4:3
Brightness		850 CD/M2	1200 CD/M2
Internal storage capacity	30 GB	32 GB	30 GB
Operating temperature	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C
Power supply	4-35 V	7-16 V	4-35 V
IP rating	IP65	IP65	IP65
Orientation	User Configurable	Landscape	Landscape
Wi-Fi capable	✔	✔	✔
Camera inputs	4		4
SOFTWARE FEATURES			
Sections	255	255	255
Language support	✔	✔	✔
Street maps	✔	✔	✔
Guidance patterns	6	6	6
Single and multi VRA	🔒	🔒	🔒
Slingshot® ready	✔	✔	✔
ISO UT	✔	✔	✔
ISO task controller	✔	🔒	🔒
Field and operations planning	✔	🔒	✔
Virtual thumb drive	🔒	🔒	🔒
Implement steering (GNSS & Camera)	✔	✔	✔
Crop registration		🔒	🔒
Autoturn	🔒	🔒	🔒

✔ Standard Feature   🔒 Unlock/Subscription Required

The industry's
only 3-in-1
guidance system

RS1™ Steering

RS1 is a fully scalable steering solution that combines GNSS, a modem, and autosteer into a complete connectivity solution. Industry leading accuracy at both high and low speeds combined with quick line acquisition improves efficiency and allows you to cover more hectares per day.

Incredible Accuracy and Power

Best-in-class diagnostics gather machine performance data while you work. The unit is designed with a simple setup and integrated help guides, and is providing remote support, file transfer, over-the-air software updates, fleet management and logistics.

Get unrivaled high-speed wireless connectivity, cellular-enabled technology, uninterrupted signals/data transfer, industry-leading wireless RTK corrections, vehicle tracking, and access to live remote support from Raven's team of experts.

RS1™ Steering & Connectivity

- Compatible with CR7®+ and CR12®+
- All-in-one concept - easy installation
- Integrated steering controller
- Integrated GNSS receiver and antenna
- Scalable GNSS solutions:
  - SBAS
  - GS-Lite
  - Satellite GS pro
  - RTK-L
  - RTK pro
- GPS, GLONASS, BeiDou, Galileo

- Optional integrated dual-sim GSM modem
- Slingshot® data transfer, diagnose & support
- Easy-to-use calibration wizard
- High quality steering
- Continuous backwards driving
- Compatible with ISOBUS 11783 Virtual Terminal
- Multi-lingual support

SC1™ Steering

SC1 is equivalent in performance to the RS1 with the ability to be combined with your existing GNSS receiver. With SC1, you get all of the benefits of Raven technology packages while using the same receiver.

- Enhanced steering performance
- Enhanced 3D compensation for rugged terrain
- Simplified field calibration procedure
- Interface VSN® steering with Raven display

GNSS
Receivers

500S™

500S is an affordable, entry-level GNSS receiver. It tracks GPS, GLONASS and BeiDou for improved strength in any environment. Fixed or magnetic mounting options make it ideal for portable and dynamic applications.
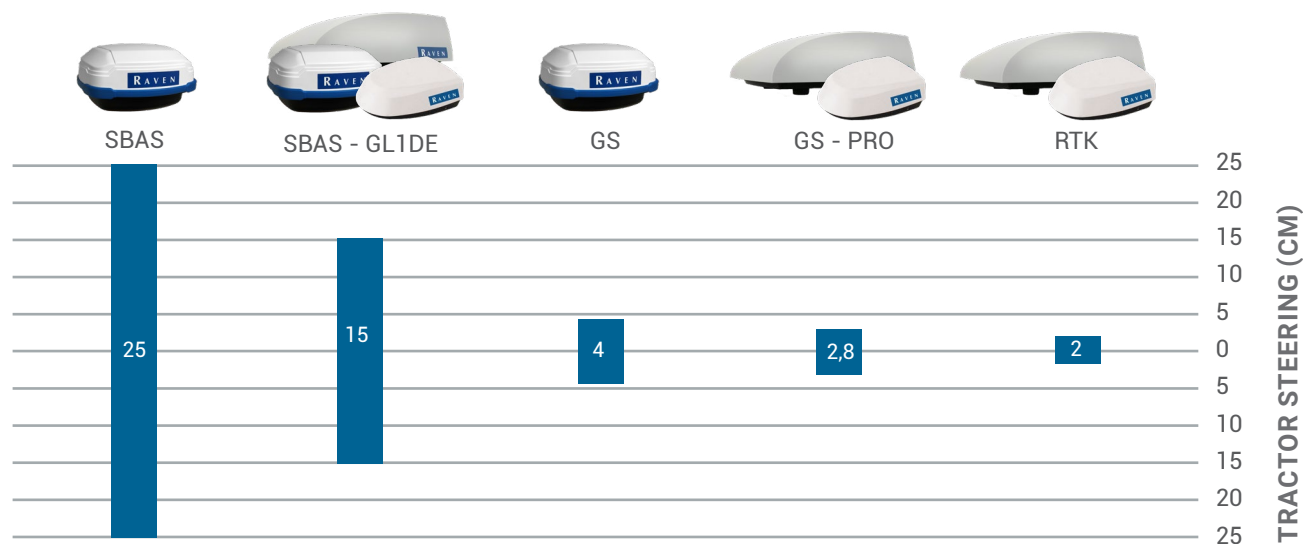
700S™

700S is an advanced GNSS smart antenna from Raven. It comes standard with GLONASS and autonomous dual-frequency GL1DE®, SBAS and optional GS-Lite, GS-pro and RTK.

Raven RS1 On-Line Steering Comparison

Best-in-class diagnostics gather machine performance data while you work. The unit is designed with a simple setup and integrated help guides, and is providing remote support, file transfer, over-the-air software updates, fleet management and logistics.

Get unrivaled high-speed wireless connectivity, cellular-enabled technology, uninterrupted signals/data transfer, industry-leading wireless RTK corrections, vehicle tracking, and access to live remote support from Raven's team of experts.

SBAS	SBAS - GL1DE	GS	GS - PRO	RTK

TRACTOR STEERING (CM)

25
20
15
10
5
0
5
10
15
20
25

SBAS: 25
SBAS - GL1DE: 15
GS: 4
GS - PRO: 2,8
RTK: 2

NOTE: Achievable accuracy and convergence time may vary based on capability of receiver, antenna, ionospheric activity, and multipath environment

GNSS-ANTENNA + TERMINAL

GNSS-SIGNAL
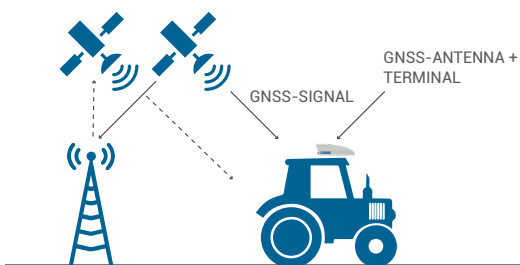
How Satellite Correction Works

- Base and tractor receive GNSS

- Base knows exact position and sends current correction back to satellite correction

- Tractor receives correction from satellite correction

GNSS-ANTENNA + TERMINAL

GNSS-SIGNAL

RTK-CORRECTION SIGNAL
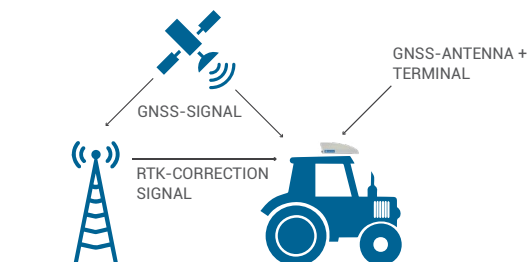
How RTK Correction Works

- Base and tractor receive GNSS

- Base knows exact position and sends current correction direct to tractor via radio or internet

- Tractor receives correction from base

Platform Compatible
and flexible
steering solutions

Focus on your operation and let Raven take care of steering

Raven steers your tractor effortlessly and with unprecedented precision. While adjusting the planting distance of your planter, Raven will maintain a perfect row spacing and remind you that the next pass is a tramline. When every minute counts, Raven helps you deliver peak performance in the field.

Features and Benefits

- Automatically steer from a speed of 72 m/hour to 26 m/hour

- Effortlessly transfer system between vehicles

- Steer perfectly in reverse, around curves, or with heavy front implements

- A contactless steer angle sensor ensures trouble-free and accurate measurement, even under challenging conditions

- The proven, flexible ISOBUS system ensures that the Raven system is easily expandable with implement steering or other ISO solutions (UT, section control, task controller)

Steer-Ready

Raven can also connect with steer ready tractors and machines directly from the manufacturer, including:

- Amazone
- Case IH AccuGuide™
- Challenger®
- Claas Autopilot™ and OSI
- Deutz Fahr Agrosky
- Fendt VarioGuide
- JCB

- John Deere AutoTrac™
- Kubota
- Massey Ferguson Auto-Guide™
- New Holland IntelliSteer®
- Steyr S-Tech
- Valtra Auto-Guide™
- Versatile
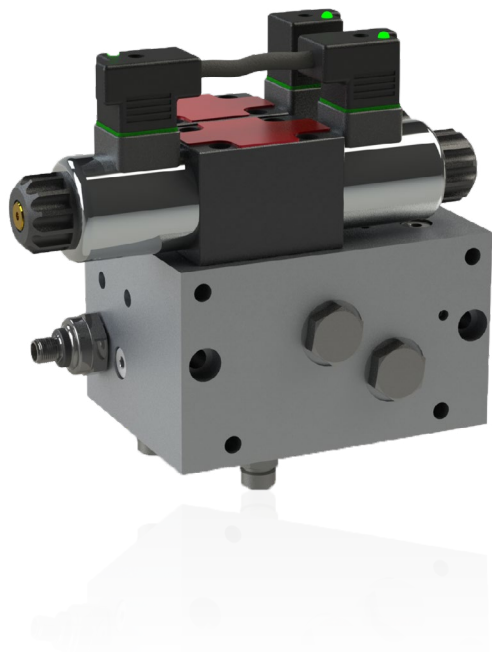
Hydraulic Manifold

Raven's exclusive hydraulic valve can be retrofitted to almost any machine - hydraulic block (manifold) with load sense as well as with open center systems. This enables you to equip all machines with hydraulic GNSS steering.

DirecSteer

Raven's DirecSteer is an intuitive electric steering solution that allows users to focus more on other parts of their operation. DirecSteer is a smart motor with internally controlled torque and electrical current. It works all while contributing to a simple, safe, and silent operation. Compatible with most tractor platforms, DirecSteer is a smart mounted system with an easy to operate control panel and widgets.

Less Damage
More Acres
Less Stress

VSN® Visual Guidance

Exclusive radar sensors and a visual guidance camera guide sprayers, spreaders, tractors, and other machines based on where rows are actually planted — giving you more precision than just a GNSS system.

This innovation utilizes a non-contact stereo vision camera to navigate crop rows, allowing the operator to focus on all other aspects of effective application control. The solution minimizes crop damage and covering up to 20% more acres in a day result in a quick return on investment.

VSN® Solutions

- Reduces operator fatigue and crop damage

- Guides machine accurately to the actual planting vs theoretical

- Allows to automatically adjust to planting inconsistencies

- Enables faster vehicle speed

- Works in areas of limited GPS/GNSS coverage, i.e. next to tree lines, ditches, hills, etc.

- Accurately operate in full canopy crop conditions

Features & Benefits

- Enhanced machine control for sprayer efficacy

- Reduces operator fatigue and crop damage

- Uses state-of-the-art image sensor and processing technologies to deliver quick response rate and better control

  - Crop types: corn, soybeans, cotton, and sorghum

  - Complete solution from 4 inches (10 cm to 90% canopy)

  - Row spacing 15 – 40 inches (38 cm – 1 m)

  - Weed coverage ≤30%

- Performance

  - Vehicle speeds exceeding 20+ mph (32 km/h)

  - Terrain grades of up to 8 degrees

  - Cross winds up to 15 mph (24 km/h

- Live video row overlays in Viper® 4+ and CR12®+ platforms

- In-field calibration

- ISO UT user interface, custom control widgets

- Software update support (OTA)

- Automatic fall-back to GNSS in areas not planted or without crop

CROP HEIGHT RANGE	4 inches (10 cm) to 90% canopy
ROW SPACING	15 – 40 inches (38 cm – 1 m)
WEED COVERAGE	<30%
VEHICLE SPEED	20+ mph (32 km/h)
SLOPE / TERRAIN	≤ 8°
CROSS WINDS	15 mph (24 km/h)
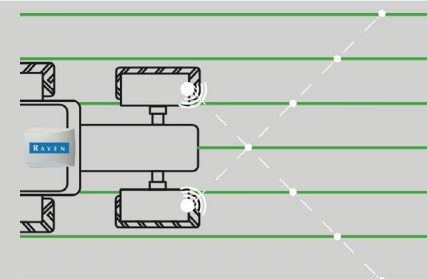
- Radar sensors for full canopy mode
- Non-contact row steering solution

3 Modes of Performance

GPS/GNSS MODE

- Uses GNSS and guidance lines

- Traditional steering/ path planning

VSN MODE

- Row guidance utilizing the image sensing of the VSN Camera

- Guides machine when camera quality is above user defined threshold

VSN+ MODE

- Fall back to GNSS guidance (quality below user defined threshold)

- Ability to use GNSS for line acquire and then transition to VSN Mode

Plug
and Play
ISOBUS

ISOBUS is the standard communication protocol for agricultural equipment manufacturers that allows computers, tractors and implements from every brand to communicate seamlessly with each other. Raven's displays are fully ISOBUS compatible with standard UT (Universal Terminal) unlocked.

Equipped with the standard ISOBUS IBBC connector, every ISOBUS implement can plug into our ISO display and get the same user interface (UI) and workflow on our display.

ISOBUS

ISOBUS delivers value to the farm from day one. After a machine is upgraded with a Raven display, full ISOBUS capabilities are equipped as well.

ISOBUS enables automatic section control and speed-dependent rate control, increasing operational efficiency. Raven's displays control up to 5 products with ISOBUS, increasing operational efficiency with variable rate and sectional controls.

Our products are fully scalable and upgradeable. If you need to control the implement this season and want to add autosteering next season, you can configure your solution to fit your needs.

Split Screen

Raven's CRx software provides a high level of flexibility. The layout is fully editable, which enables the user to set up the optimal layout for a wide range of applications. The editable screen is fully ISOBUS capable and can control 254 machine sections and/or implement control rates. The interactive ISOBUS widget allows full control of ISOBUS implements.

Beside the supported ISOBUS AUX-N functionality, implement control is possible with the CRx software and any ISOBUS joystick. Users can navigate through the ISOBUS implement screen with a joystick, which is similar to Raven's implement control widgets.

See instant savings with sensor-based variable rate application

Augmenta® Field Analyzer

The Augmenta field analyzer uses cutting-edge computing and AI to translate visual data into agronomic insights, fine-tune prescriptions, and implement variable rate applications in real-time. The multi-spectral computer vision and machine learning (CVML) unit:

- Provides and applies the best variable rate application (VRA) prescriptions as the applicator simply drives.

- Easily installed on most common tractor and sprayer platforms.

- Perceives and analyzes specific environmental factors with a 138-foot field of view.

- Translates its analysis into variable rates that are automatically applied, optimizing input use and improving profits.

- Can optimize applications for up to five specialized LiveVRA Services: fungicide, in-season nitrogen, plant growth regulator (PGR), and different types of harvest aids (desiccants, defoliants, boll openers).

Features & Benefits

- All-in-One Cab-Mounted Device: Augmenta presents a streamlined solution with an all-in-one cab-mounted device that efficiently controls the entire boom.

- Input Savings: Realizes significant input savings, contingent on crop conditions, application rates, and other factors.

- Long-Term Sustainability: Augmenta supports improved long-term sustainability practices, aligning with environmental stewardship.

- Minimized Chemical Waste: Contributes to environmental responsibility with Augmenta's technology, minimizing chemical waste through accurate application.

- Easy Installation: Enjoy the simplicity of installation with a single cab-mounted sensor, ensuring hassle-free integration into your existing setup.

- Diverse LiveVRA Services: Access up to five specialized LiveVRA services, including in-season nitrogen management, fungicide application, plant growth regulators, and harvest aids.

- Comprehensive Crop Health Data: Gain valuable insights with Augmenta, offering detailed crop health data, high-definition snapshots, and in-depth analysis. Receive Vegetation Index Reports and Virtual Fertilization Maps for a comprehensive understanding of your crop's conditions.

Your all-season all-purpose rate controller

Rate Control Module (RCM)

Product efficacy is more important than ever before. RCM is the most powerful and flexible ISOBUS rate controller on the market with an intuitive and easy to follow menu structure. The ability to set up and save various application modes optimizes the application of any input.

The RCM covers a wide variety of applications - up to five-product liquid and granular control, NH3 (including AccuFlow™ HP+), air carts, planters, seeders, and generic applicators. Sixteen-section control eliminates expensive skips and overlaps for all phases of your operation, from spraying to NH3, and fertilizer application to planting.

The RCM is compatible with many ISOBUS virtual terminals on the market, including the Viper™ 4+, CR7®+ and CR12®+.

Specifications

- Powerful multi-use product controller
- Granular and liquid use simultaneously
- Up to 4 ICD injection pumps
- Easy intuitive wizard setup
- Multilingual
- Controls up to 5 products per unit

Features & Benefits

- AEF certified
- Liquid product control
- Section control up to 16 sections
- Control of up to four direct injection ICD pumps
- Tank fill monitoring
- Dry applications
- Spreader and air cart profile
- Liquid applications NH3 product control
- Control up to five product applications and 16 planter sections
- Intuitive user interface and diagnostic features
- Certified worldwide with regulatory marks for CE, RCM, IC, FCC, E-Mark, CNC Mark, ANATEL, ICASA, Ukr-sepro, and SRRC
- IP67 environmental rating for the harshest of environmental conditions

Pull-Type and Self-Propelled Sprayers and Liquid Fertilizer Applicators

- Single liquid product control
- Compatible with up to 4 Sidekick Pro™ direct injection pumps
- Tank fill monitoring

Pull-Type and Self-Propelled Spreaders

- Rate control up to 5 products
- Section control up to 12 On/Off sections
- Spinner/Fan RPM monitoring and control
- Control auxiliary functions such as gates or oilers
- Pair with 3rd party scale solution for simplified product calibration; includes in-cab monitoring

Planters

- Section control up to 32 sections (Flex-seeder, Air, Electric or OEM clutches) with ground drive transmissions
- Seed rate control up to 4 hydraulic motor drives with turn compensation and up to 24 planter sections
- Seed rate control up to 16 electric or hydraulic motor drives with turn compensation and section control
- Fan/Vacuum pressure, scale, bin level and hydraulic/air down pressure monitoring options
- Liquid/Dry fertilizer add-on control via additional RCM

NH3 applicators

- AccuFlow™ HP+ Boost Pump
- Rate control up to 2 additional dry or liquid products
- Section control up to 10 NH3 sections; 14 sections total
- Temp sensor option for monitoring and alerting of liquid/vapor state
- Sidekick Pro™ ICD compatible

Seeders, Air Carts, and Generic Applicators

- Rate control up to 4 products with 16 sections or 5 products with 12 sections
- Section control up to 16 On/Off sections
- Support up to 2 fan RPM sensors; 6 pressure, bin level and/or shaft sensors; implement height switch
- Scale monitoring and user aided as-applied calibration
- Compatibility with Raven Run Blockage Monitoring (RBM)
- Compatibility with Raven ISOBUS auxiliary display for remote test calibration
- Independent control of multiple meters per product

Spray without the costly chemical leftovers

## Sidekick Pro™ Direct Injection System

The Sidekick Pro™ Direct Injection system drastically increases the half-life of the active matter in your crop protection product by bringing the active matter in contact with the clear water only at the time of application. This increases the efficacy of spray applications, costly waste, and eliminates the need for expensive stabilizers and conditioners.

Features and Benefits

- Two different types of pumps; 0.03-1.2 L/min and 0.15-6 L/min

- Up to 5 units on one machine, allowing easy switching between fields and applications with Hawkeye® Nozzle Control

- ISOBUS compatible

- No pre-mixing, tank mixing, cross contamination, or clean out, which reduces waste from unused product

- Time-sensitive chemical mixtures don't require mixing in the tank, which decreases susceptibility to wasted product in rainy or windy conditions

- Powerful positive displacement pump which injects on the pressure side, closer to the boom, for faster response time

- Eliminates waste for more environmentally friendly practices

- Flexibility with multiple chemical applications

- Reduced chemical exposure means additional safety for operator

- Adjust chemical concentration on the fly rather than spraying more or less of the entire mix

- Gives you greater flexibility in applications to tackle weed resistance and other challenges

- Automatically flush Sidekick Pro pump with Rinse Assist for increased reliability and fewer service issues

How It Works:

Sidekick Pro injects chemicals directly into the in-line mixing tube to eliminate pre-mixing and costly leftovers.
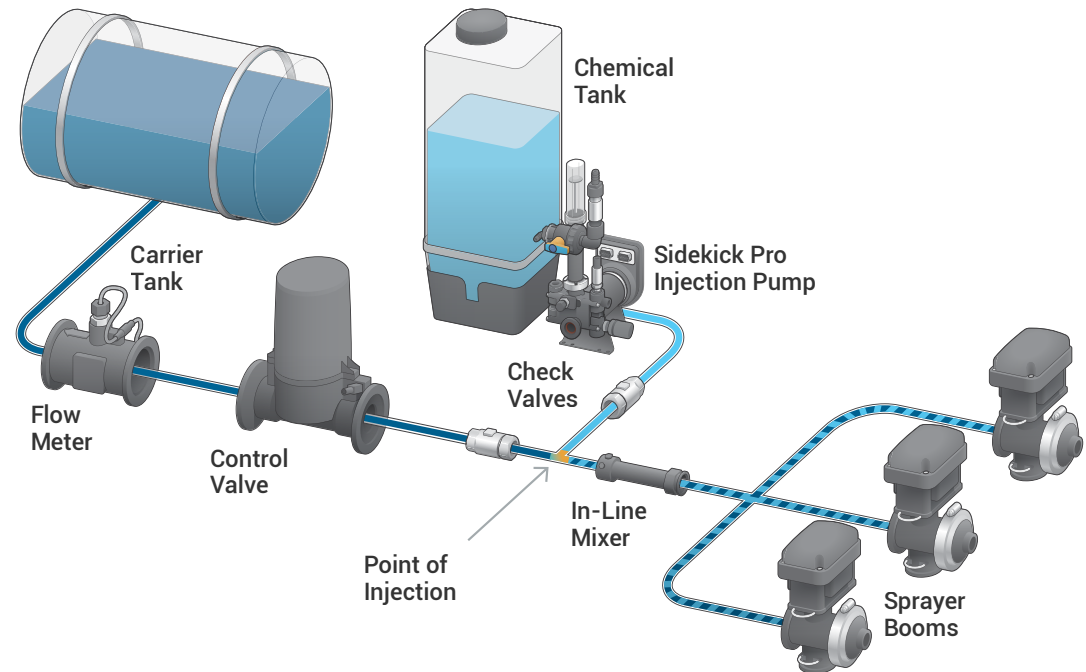
Compatibility

	Sidekick Pro	Sidekick Pro ISO	Sidekick Pro ICD
Product controllers			
Raven Product Controller	✓		
ISO Product Controller I		✓	
ISO Product Controller II			✓
Raven RCM			✓
consoles			
Viper™ 4+	✓	✓	✓
CR7®+ and CR12®+	✓	✓	✓
SCS 5000	✓		
SCS 4400	✓		
SCS 4600	✓		
3rd Party ISO Consoles*		✓	✓

*Subject to 3rd party ISO console capabilities.

The industry's most precise nozzle control system

Hawkeye® 2 Nozzle Control

Pulse-width modulation (PWM) is the cutting-edge technology in spray applications, and is quickly becoming the standard in the ag industry. Over 5.000 sprayers equipped with Raven's Hawkeye® 2 system operate in fields across the globe. Our vast experience with PWM technology allows us to provide the most precise, reliable, and easy to install systems.

Features

- Turn compensation – consistent rate across the whole boom even on turns

- Consistent spray pattern and droplet size at various speeds reduces the need of changing nozzles

- Hawkeye HD – individual nozzle shutoff on overlaps reduces crop damage and waste of chemicals

- Variable operation modes – use the system for all operation modes

ISOBUS

Hawkeye 2 is a fully ISOBUS compatible system and can be used with the ISOBUS compatible Viper 4(+) as well as with your existing ISOBUS terminal. Hawkeye 2 controls the application rate of the full sprayer and replaces the existing application controller.

The Importance of Droplet Size

Every chemical has a recommended optimal droplet size. A small droplet size has the advantage of better coverage, but at the same time can drift away more easily into adjacent fields resulting in unintended application and potential damage. Large droplets might not hit the target or do not create necessary coverage.

Traditional flow or pressure-based control systems depend on the ideal operation speed and rates of your machine to keep the optimal droplet size. This limitation leads to an ineffective spray application.

Raven's Hawkeye® 2 PWM system ensures optimal coverage of your crop and minimizes cost for crop protection products, with no need for re-spraying.

Why you want to operate with Hawkeye® 2

With Hawkeye®2: Consistent spray pattern at any speed by controlling flow and pressure

100 l/ha, 2.4 bar → 10 km/h
→ 15 km/h
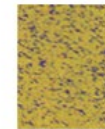→ 20 km/h
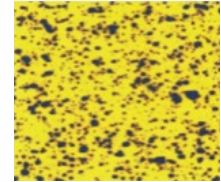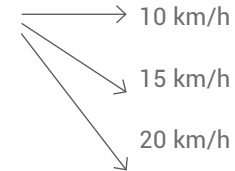
Without Hawkeye® 2: changing spray pattern at varying speeds caused by changing pressure and flow
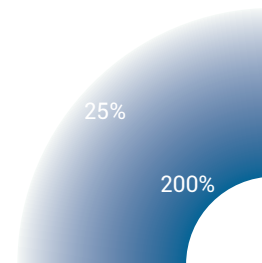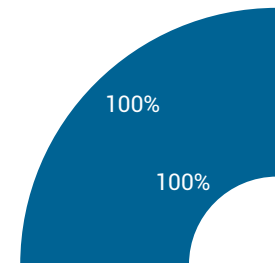
100 l/ha, 8km/h, 100kpa

100 l/ha, 15km/h, 250kpa

100 l/ha, 25km/h, 600kpa

Turn Compensation

25%
200%

100%
100%

without Hawkeye 2

with Hawkeye 2

Pulsing Per Nozzle

With Hawkeye®2, the spray pressure is always kept constant. The application rate (l/ha) is controlled with PWM valve technology. With PWM technology, every valve is turned on and off. The Hawkeye®2 system automatically changes the on-time and off-time of each valve to achieve the desired dosage.

As a result, one nozzle is now able to cover a range of varying rates, while the pressure remains constant and as a result the droplet size does not change.

The Hawkeye®2 valves are extensively tested for reliability. Each valve has its own diagnostics system, so any potential failures are detected automatically.

Equal Distribution

With the Hawkeye 2 system, the nozzles are only open for a portion of the total time. To ensure an equal distribution and coverage, the odd and even nozzles alternate when switching.

Specifications

- Nozzle by nozzle section control
- Turn compensation is standard
- Diagnostics per nozzle such as blockage detection
- Multiple adapters available for a wide range of nozzle bodies
- Up to 192 individual nozzles
- Max application rate per nozzle: 5.5 l/min
- Working pressure: 8 bar max.
- Suitable for most liquid fertilizers
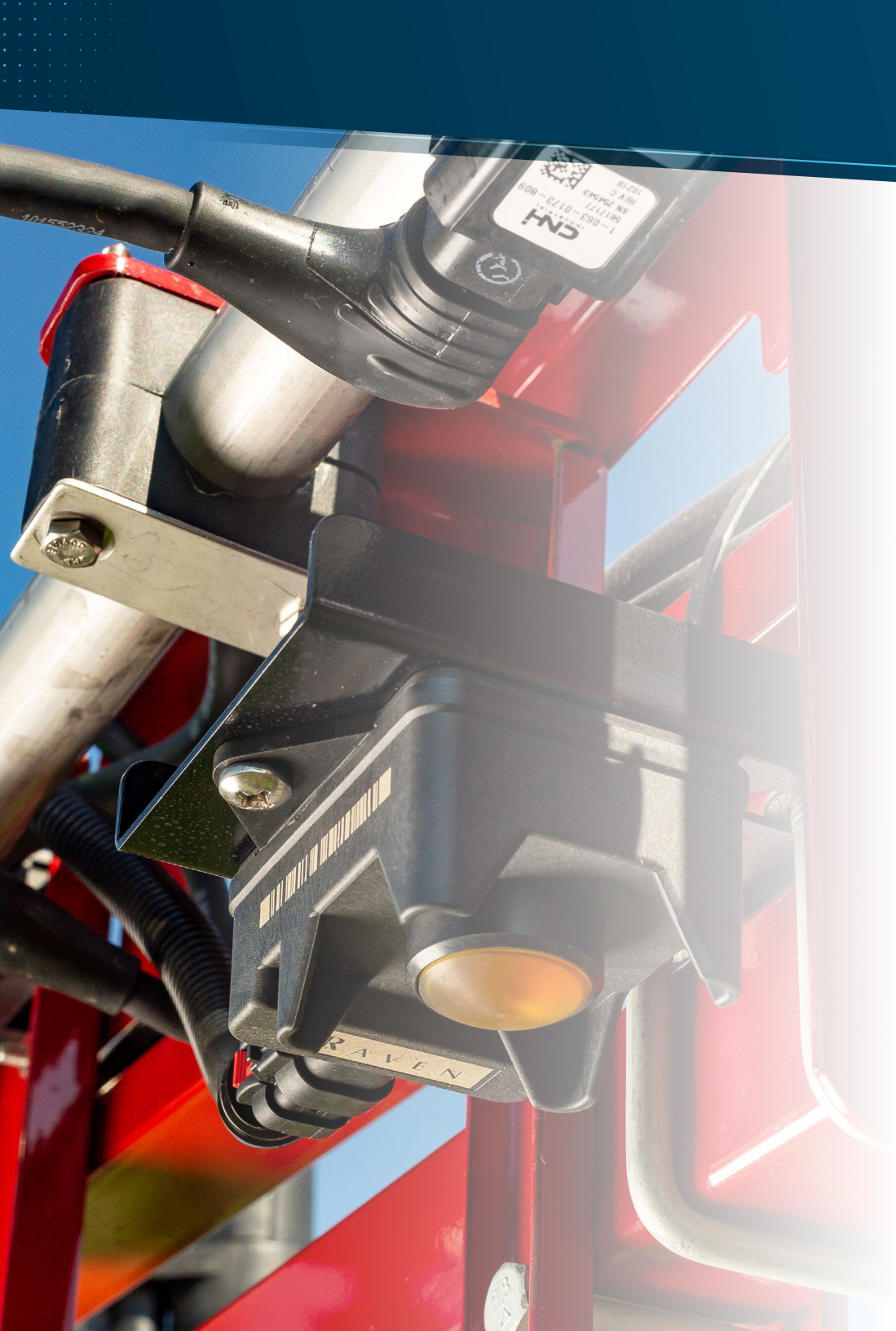
Boom
Controls

Ensuring application consistency and efficacy

Raven's high-performing boom controls use automatic boom height and section controls that improve your accuracy, savings, and profitability. This reduces application time and effort, as well as wasted inputs and chemicals.

Raven boom control systems are compatible with Raven and non-Raven equipment and come with a range of options to match your system needs, budget and performance objectives.
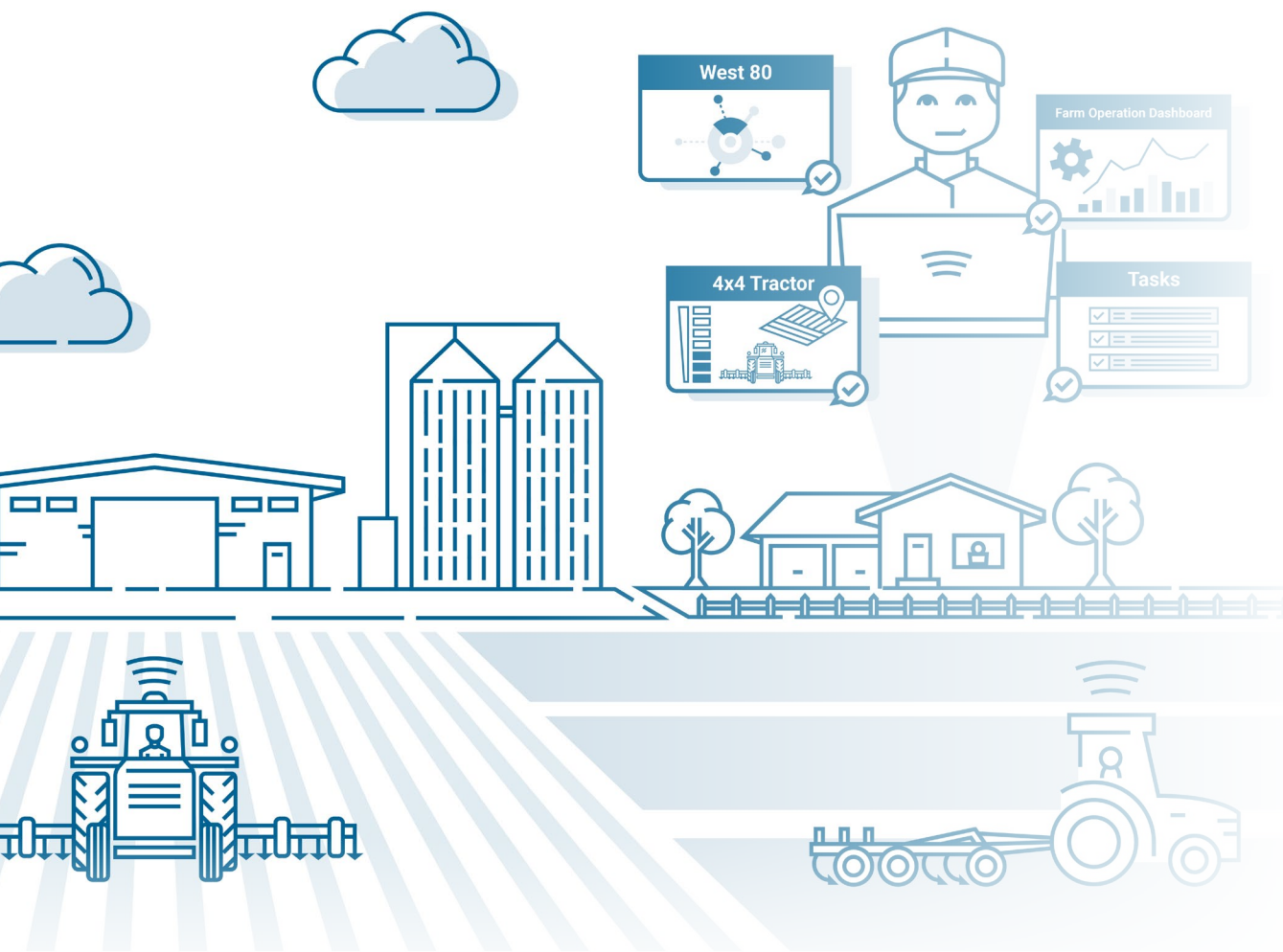
AutoBoom® XRT

AutoBoom® XRT's industry-leading radar sensor technology uses simultaneous ground and canopy detection to maintain optimal spray height for maximum product efficiency.

AccuBoom™

AccuBoom's automatic section control protects against rising input costs, with more fuel and chemical savings due to faster and more accurate spraying.

Built for
Go Time

Slingshot®

Slingshot is a suite of connected hardware, software, and logistical services that optimize planning, executing, and recording field applications.

Slingshot delivers unrivaled connectivity to RTK correction signals, online services, sophisticated data management capabilities, precision ag equipment and live in-field support and service.

Job Generator

Set up jobs in the office and dispatch to Viper® 4 field computer.

- Set up nearly all parameters of an operation ahead of time

- Reduce the risk of a costly misapplication

- Avoid errors and miscommunication

- Ensure operator goes to correct field

- Include the products, rates, field locations and entry points, RX maps

- Compatible with ROS and CRx software platforms for Viper® 4/ Viper® 4+, CR7®+ and CR12®+

Job Sync

Share live coverage between machines in the same job.

- Keeps everything in sync

- Shared coverage - multiple at once, or one at a time

- Fault tolerant data channel connection if there is an interruption in network connectivity coverage

- Re-sync when connection is restored

- Machine-to-Machine in job status widget so you know who else is currently in or has been in the job

- Joining a job is as easy as starting a regular job
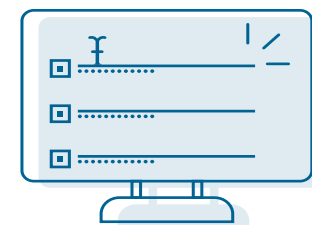
Analytics

Suite of tools for fleet productivity and machine telematics.

System events

- Receive notifications on DTCs (Diagnostic Trouble Codes) on location and timestamped system events

- Customizable by user account, location or grouping, per machine or per product

Fleet analytics

- Reporting metrics on total hectares, total working hours, hectares per day, hours per day, and fleet or machine hourly or daily average

Slingshot® RTK

- Provides reliable RTK corrections streaming

- Compatible with Slingshot RTK Base Stations and CORS RTK Networks

- Cellular delivery overcomes satellite and line-of-site radio limitations

- Patented dual corrections streaming for rapid interruption recovery

- Primary and diversity cellular antenna for superior performance

- Always up to date with remote updates and management

- Requires Slingshot Field Hub or RS1

Fleet View

- A simple tool to see where everything is at a glance

- Each Slingshot device reports its position every 30 seconds

- Know where your fleet is at all times

- See if they are in jobs, idle, or active

- Keep track of everything with full screen view

- Historical tracking for path recreation

- Route work to the machines that are closest to the field

Slingshot® Link

- See what software your field computer equipment is running and send updates right from your desk

- Download latest software directly on your machine – no thumb drives

- Manage software versions from the office

- Stay current on all features and functionalities and maintain a consistent fleet

- Supports Viper® 4/Viper™ 4+, CR7®+ and CR12®+, and RS1™

File Transfer

- Record and invoice work quickly and accurately

- Get application data back to the office without chasing thumb drives

- Send VRA maps to field computers

- Invoice your work sooner

- Reduce the risk of data loss

Remote Support

- See exactly what the operator sees and identify the issue more efficiently

- Use as a training tool for the operator

- Live view of field computer display

- Reduce machine down time

- Dealer, owner, and Raven can also log in and help, with permission

How to Access Slingshot® Services

- Slingshot Field Hub

- RS1™ Guidance & steering system

- Viper® 4/Viper® 4+, CR7®+, or CR12®+ field computers

- Create an account or log in via Ravenind.com
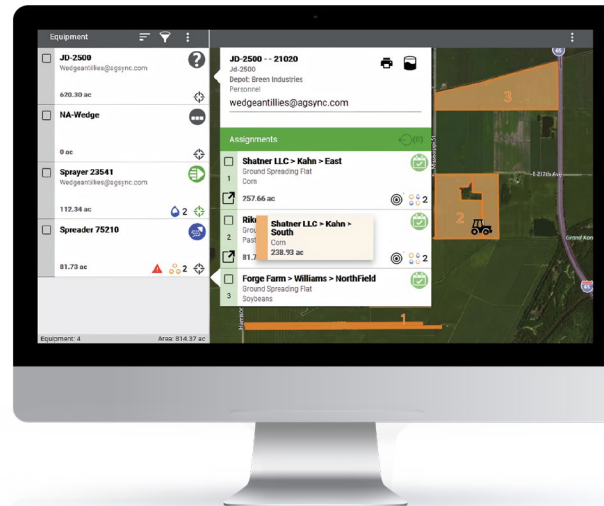
Dispatch Pro

Dispatch Pro is newest addition to the Slingshot platform. Enabling the industry's first and truly complete Connected Workflow users gain an average of 20% efficiencies when they use Raven's Slingshot® platform to create a Connected Workflow®.

We know having to manage multiple people, and pieces of equipment across many locations is difficult. Which is why Dispatch Pro was created specifically for you. To lessen or eliminate many of those burdens.
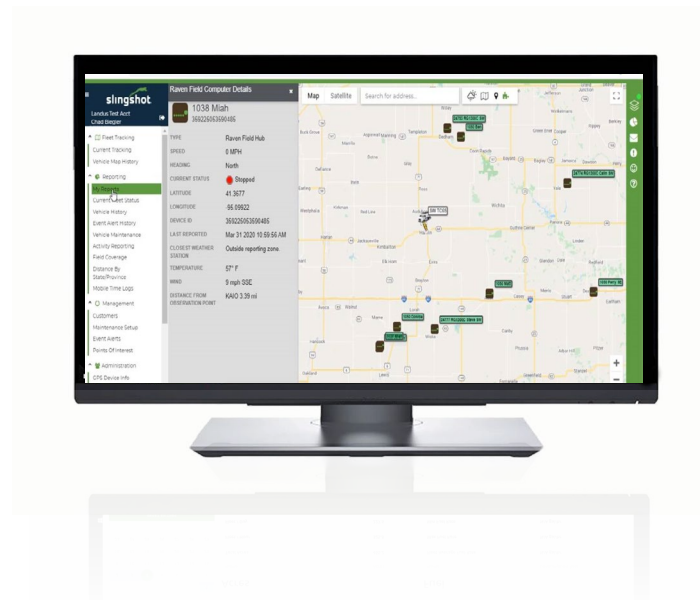
Fleet Tracking

Slingshot Fleet Tracking allows users to wirelessly track the location and other important information about their trucks, vehicles, trailers, tanks and other moving assets by providing accurate machine running data in real-time.

This gives ag retailers and enterprise growers a holistic view of their entire fleet — including work, idle and transit times — to better manage their equipment, assets and operations.

Standard Application Controls

Precisely control your chemical applications

No matter how advanced or basic your application control system needs to be, Raven brings you the most respected products in the world.

With over 40 years of market leadership in spray and application controls, Raven's innovative products are designed to improve your operation with unprecedented precision.

Valves

Raven valves are designed and manufactured for simple maintenance and serviceability.

Flow Meters

Raven flow meters measure a wide range of liquids at flow rates from 0.1 GPM to 3000 GPM. For monitoring liquid, NH3 and manure applications, the Magmeter Series is the best option.

Tank Fill Monitor

The Tank Fill Monitor integrates with the Rate Control Module (RCM) to display tank capacity, fill volume, tank volume, sparge pressure, and flow rate for your application.
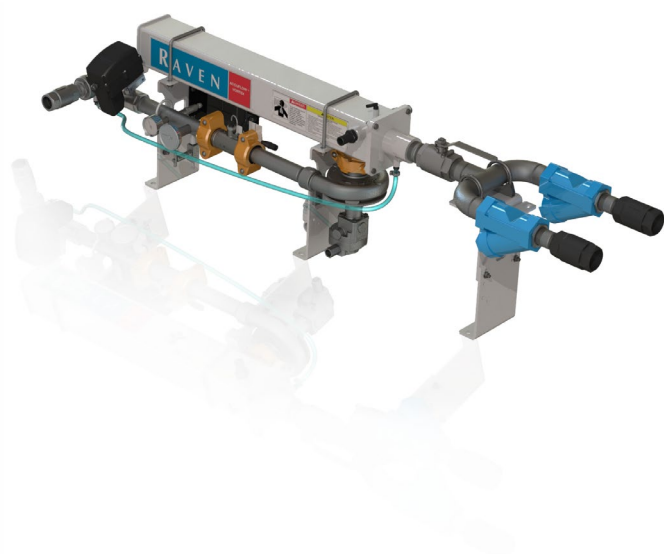
The AccuFlow™ anhydrous ammonia (NH3) distribution system converts NH3 gas to liquid, keeping it cold and fluid during application. With fast cooling, high capacity, and application rates up to 80 gallons per minute (gpm), you can cover more acres per day. AccuFlow is a more accurate and efficient replacement for dual cooler systems.
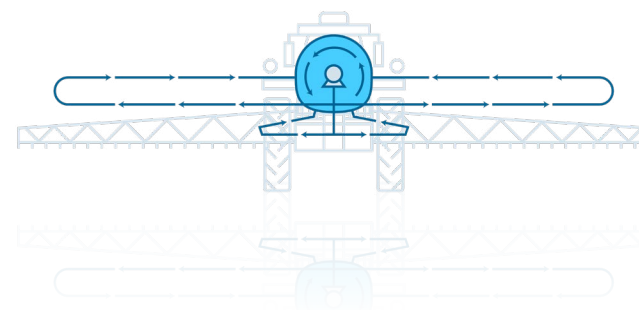
Boom Recirculation™

Boom Recirculation, with Pulse Width Modulated (PWM) nozzle technology, uses add-on hardware to aid in efficient clean out of the boom and plumbing system. By circulating liquid from the outside tip of the boom and back to the center section, product settling is reduced and waste is eliminated.

SCS Control Consoles

Maintain total flow control with Raven Spray Control Systems (SCS), the standard for reliable everyday spraying for over 40 years. The SCS is designed to provide uniform spray and granular applications regardless of vehicle speed. You set the target application volume per area, and it automatically maintains the application rate. It also functions as an area monitor, speed monitor, and volume totalizer, enabling you to have full visibility of your spraying application.

Switch Pro

The Switch Pro™ control console is designed to help growers and ag retailers move up to a new level of precision. Switch Pro gives you on-off section control, adjustable 0-100 percent coverage control, and a manual override function for greater savings and productivity.

Switch Box

The Raven CAN Switch Box is designed to interface with Raven CAN control consoles and legacy field computers, offering product and section control features at the operator's fingertips.

For more product information, training, or configuration, visit RAVENIND.COM