



# RAVEN CRX

Affordable – Scalable – Exceptional Value

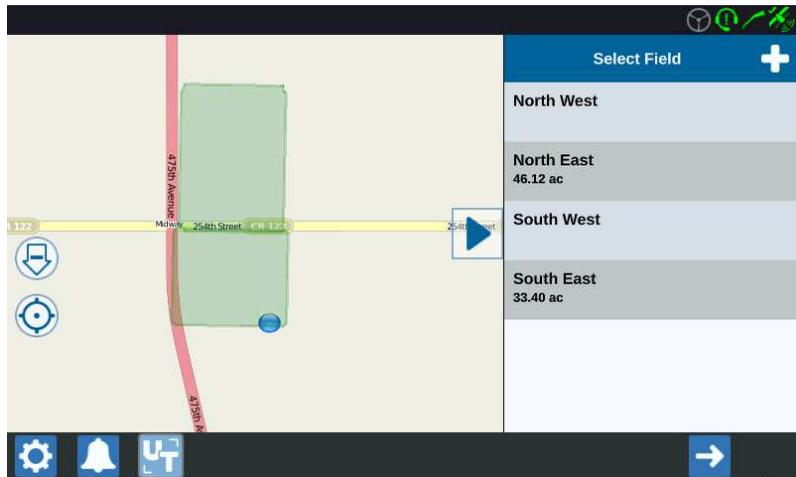
RAVEN

# RAVEN CRX

## CUSTOMER FOCUSED EXPERIENCE



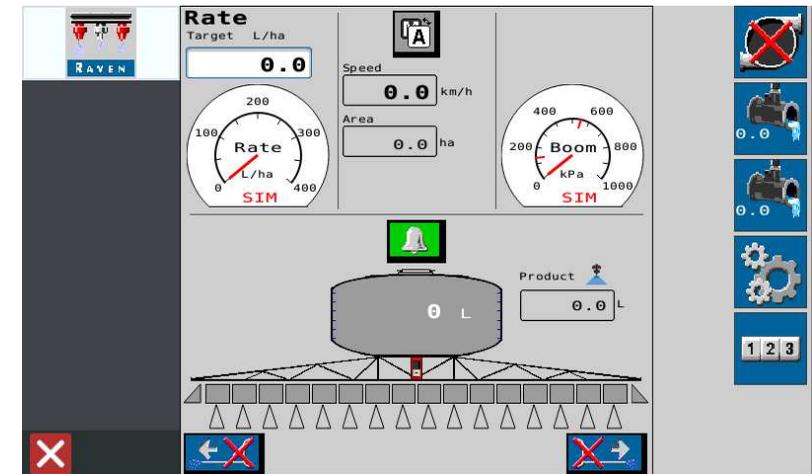
- 2 Hardware Platforms 1 simple yet scalable, grower-centric user interface
  - & 12" Display
- 3 Field Computers
  - CR7, 7" Display
  - CR12, 12" Display
- ISOBUS
  - Universal Terminal (UT) included
  - Task Controller (TC) additional unlock



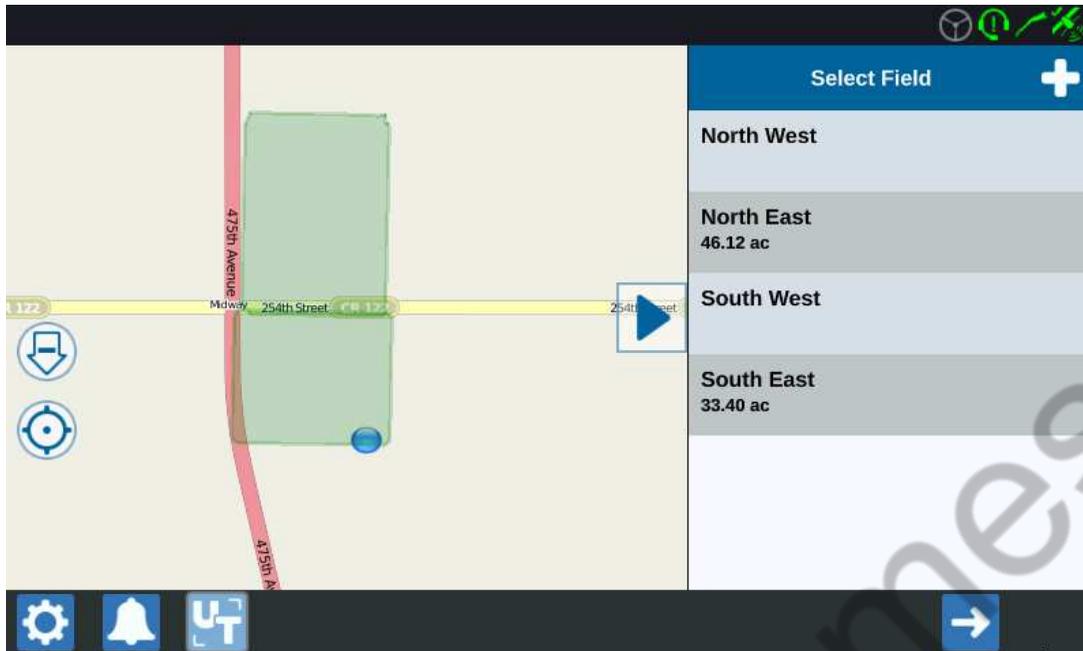
# USER INTERFACE

## FOUR MAIN SCREENS

- Map Based Home Screen
- One Settings Page – Accessible from inside job
- Job Run Screen
- ISOBUS Universal Terminal



# MAP BASED JOB NAVIGATION



- Streetmap background with pinch, zoom, pan
- Auto field boundaries – keep organized automatically
- Interactive Field/Job list and Map view
- Field -> Job Navigation Hierarchy
  - GFF Meta Data Supported



## CUSTOMIZABLE IN-JOB LAYOUT

### SIMPLIFIED WIDGET CONCEPT

- One Widget List in Slide in Sidebar
- Widgets are dragged and dropped on screen
- Field Overview and Navigation Views can have separate widget layouts
- Widgets can be minimized
- Ability to access settings page from inside a job

## ACCESSIBLE SETTINGS



- Settings are available from any page for easy access
- Settings options condensed to simplest options possible
- Intuitive layout
- Setup short cuts to most used settings

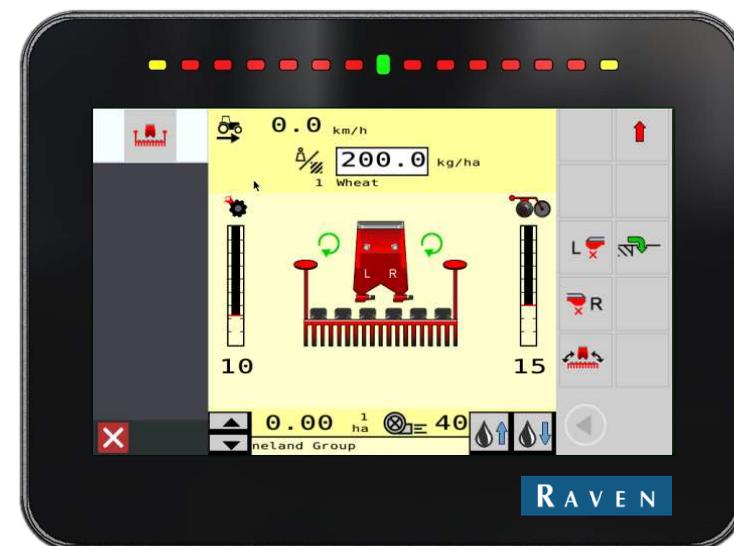
# FUNCTIONALITY

## STANDARD

- Guidance (Straight A-B, A plus heading, Pivot, Contour, Last Pass)
- Auto steering (Hydraulic, steer-ready, Smartrax MD motor)
- ISOBUS Universal Terminal (ISO-UT)
- Section View (max. 10 sections)
- Product Control (max. 5 products)
- Slingshot Remote Support, File Transfer, Software Updates

## OPTIONAL (VIA UNLOCK)

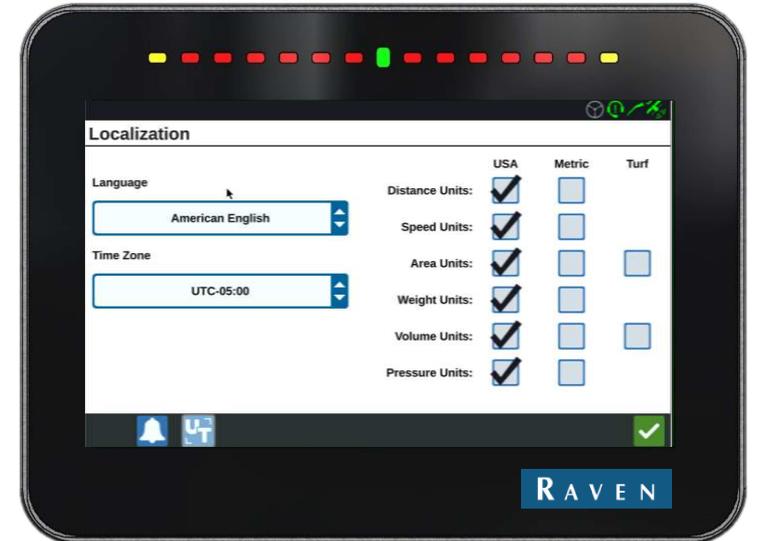
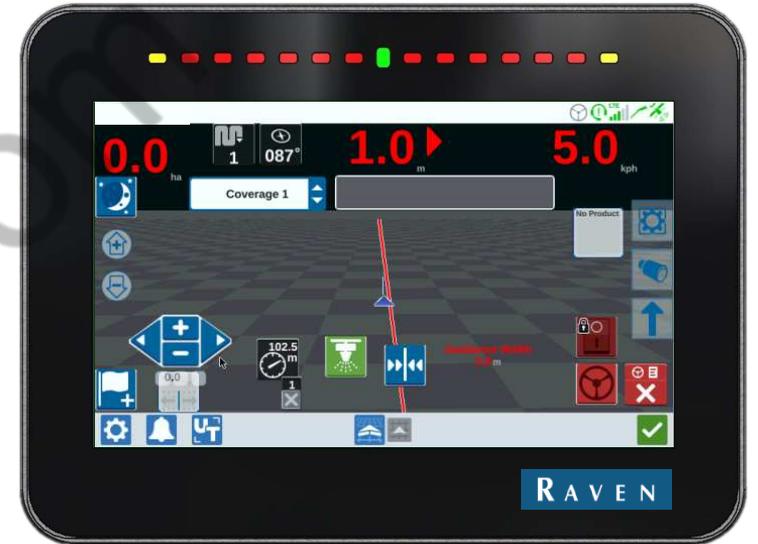
- ISOBUS Task Controller with Section Control for >100 sections.
- VRA (max. 2 products)



RAVEN

# USER INTERFACE

- Flexible layout with widgets
- Night Mode
- Metric support
- Multi-language support (*additional languages on request*)
  - English
  - Russian
  - German
  - Dutch
  - French
  - Portuguese
  - Romanian
  - Serbian
  - Bulgarian
  - Hungarian
  - Czech
  - Spanish
  - Lithuanian
  - Latvian
  - Norwegian
  - Polish
  - Greek
  - Croatian





# HARDWARE

## KEY FEATURES CR7

- IP65 Splash Proof
- Simple base unit cabling
- High brightness Display
- Scratch free Touchscreen
- 7-16VDC input
- External GPS for flexibility



# TECHNICAL SPECIFICATIONS CR7

## Connections

- CAN x2
- Serial x3
- USB
- Ethernet
- Wi-Fi
- Bluetooth
- Radar Speed Output
- Ignition Sense

## Computing

- 8GB Storage
- 2GB RAM
- Quad Core Processor

## Display

- Screen Brightness 850 NITS
- 7" Widescreen
- Capacitive Touch
- 480x800 Resolution
- Integrated Lightbar

## Power

- 7-16 VDC

## Mechanical

- 19 cm x 14,3 cm x 8 cm
- Ram Mounted

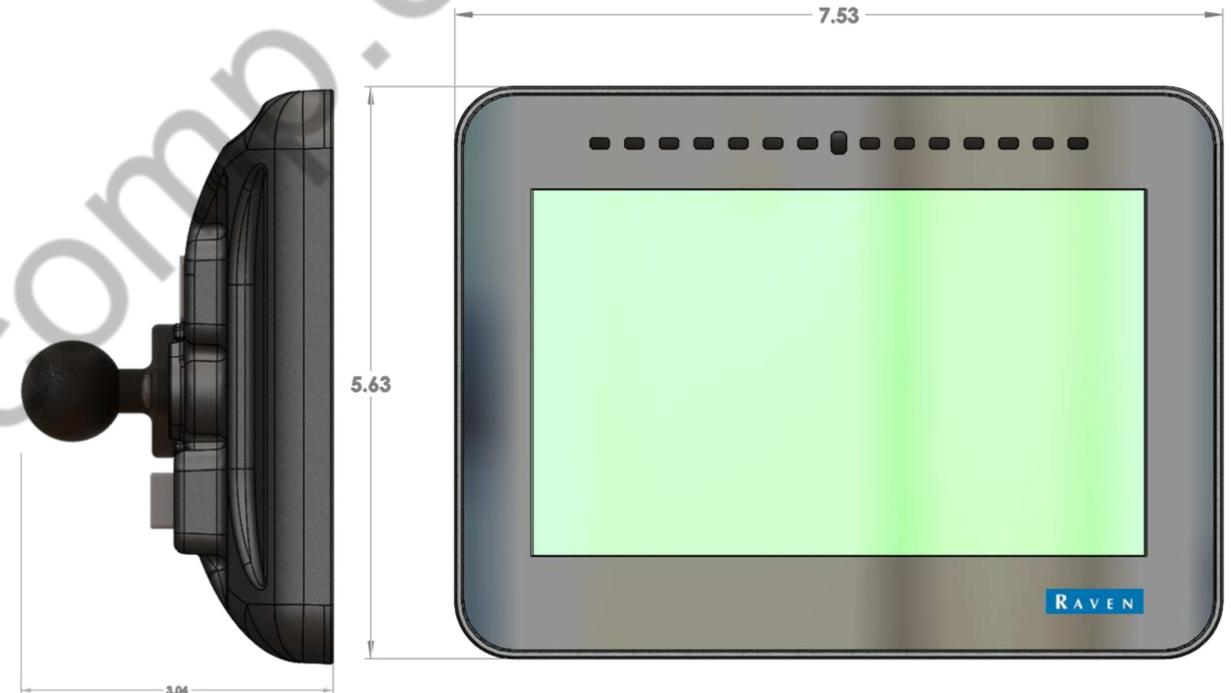
## Environmental

- IP65

## Certifications

- CE
- E Mark

## External GPS (Optional)



## KEY FEATURES CR12

- 12.1" capacitive touchscreen
- IP65 Splash Proof
- High brightness Display
- Scratch free Touchscreen
- 4-35VDC input
- Operations planning
- ISObus and map based navigation



# TECHNICAL SPECIFICATIONS CR12

## Connections

- CAN 4x
- Serial 5x
- USB 2x
- Ethernet
- Wi-Fi
- Bluetooth
- Radar Speed Output
- Ignition Sense
- 4 camera inputs

## Computing

- 30GB Storage
- 1GB RAM
- Quad Core Cortex A9 Processor

## Display

- Screen Brightness 2300 CM/M2
- 12,1" Widescreen
- Capacitive Touch
- 1024x768 Resolution

## Power

- 4-35 VDC
- Reverse polarity protection

## Mechanical

- cm x cm x cm
- Ram Mounted
- 2,13kg

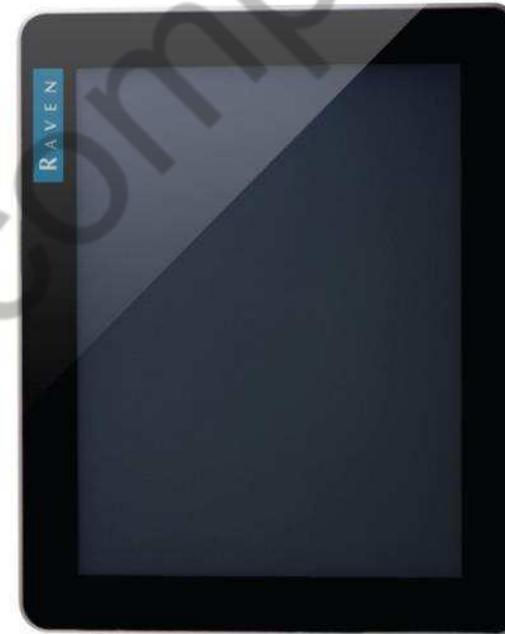
## Environmental

- IP65

## Certifications

- CE
- E Mark

## External GPS (Optional)





RAVEN 500S



RAVEN RS1



RAVEN 600S

# GPS OPTIONS

## RAVEN 500S

- Single Frequency EGNOS receiver ( $\pm 25\text{cm}$ )
- GLONASS standard
- E-Dif technology (GPS smoothing filter) improves accuracy especially in regions without EGNOS coverage
- Upgradable to GS Lite, Satellite GS ( $\pm 5\text{cm}$ ), not RTK
- Both manual guidance and auto steering

## RAVEN 600S & RS1

- Dual Frequency EGNOS receiver ( $\pm 15\text{cm}$ )
- GLONASS standard
- GLIDE technology (GPS smoothing filter) improves accuracy especially in regions without EGNOS coverage
- Upgradable to GS-Lite, Satellite GS ( $\pm 5\text{cm}$ ) and RTK. RTK-L available for RS1 only
- Both manual guidance and auto steering

Configuration	EGNOS	Autonomous (Glide/e-Dif)	GS-Lite	Satellite GS	RTK	Steering	ISOBUS
CRx + 500S	S	S	O	O	X	O	O
CRx + 600S	S	S	O	O	O	O	O

S = Standard, O = Optional, X = not available

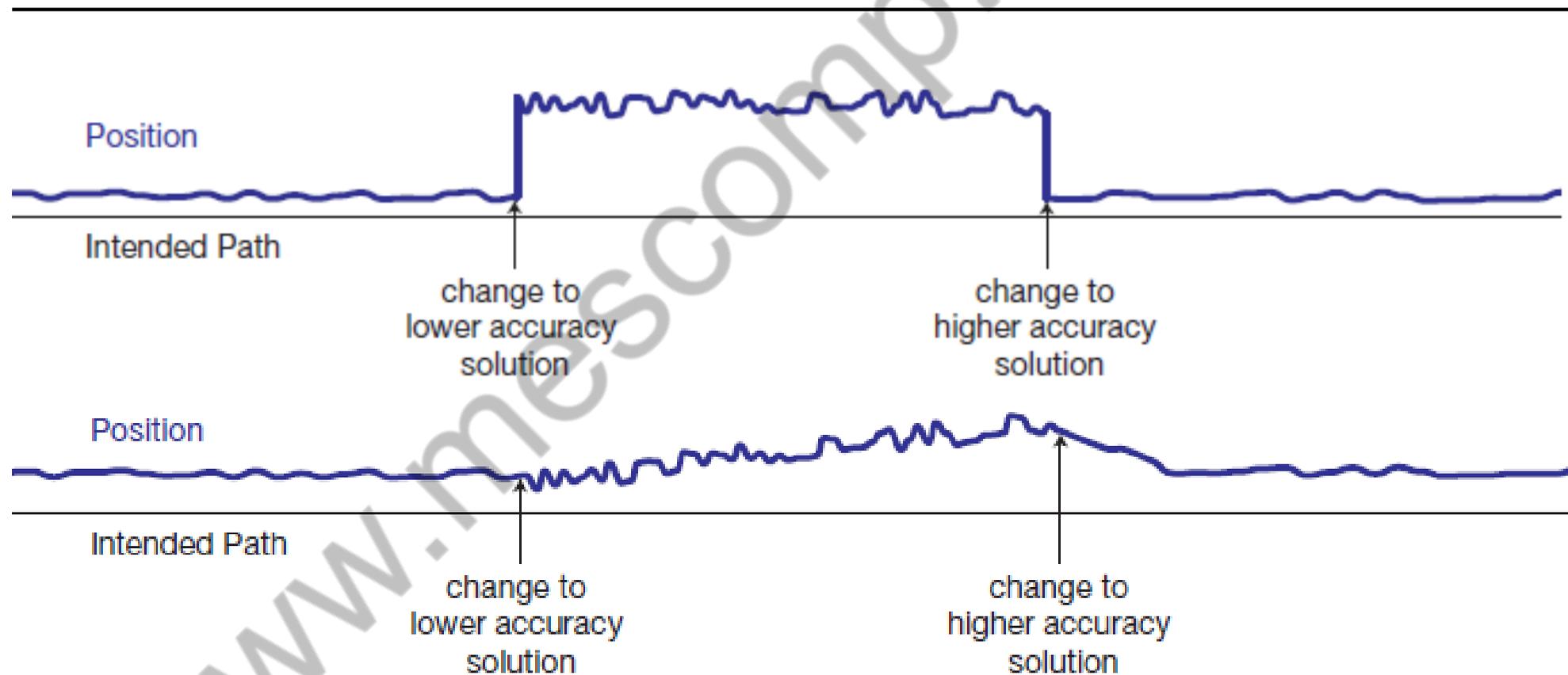
# GNSS CORRECTION OPTIONS

CORRECTION	REPEATABILITY	PASS-TO-PASS ACCURACY	CONVERGENCE	UNLOCK	SUBSCRIPTION
AUTONOMOUS SOLUTION	--	30 cm*	<10 min		
<p>Autonomous solution comes standard with all Raven receivers. Usable in areas without SBAS availability.</p>					
SBAS	<60 cm	15 cm	5-7 min		
<p>SBAS includes area specific differential systems, WAAS and EGNOS.</p> <ul style="list-style-type: none"> <li>• GLONASS capable</li> <li>• Ideal for broadcast applications</li> </ul>					
SATELLITE GS-LITE <i>(500S only)</i>	50 cm	30 cm*	10 min*	•	
<p>Ideal for tillage, broadcast spraying, and fertilizer applications.</p> <ul style="list-style-type: none"> <li>• Satellite delivery</li> <li>• GLONASS included</li> </ul>					
SATELLITE GS-LITE <i>(600S, RS1, Viper 4/4+)</i>	50 cm	30 cm*	<5 min*		•
<p>Utilizes premium correction data delivery to provide solutions with high accuracy and quick re-convergence in areas with loss of correction stream.</p> <ul style="list-style-type: none"> <li>• Corrections delivered via satellite direct to end user</li> <li>• No base station infrastructure required, simplifying equipment needs</li> </ul>					
SATELLITE GS <i>(500S only)</i>	5-10 cm	5 cm	<30 min		•
SATELLITE GS <i>(600S, RS1, Envizio Pro II, Phoenix 300 w/USB, Viper 4/4+)</i>	5-10 cm	5 cm	<20 min	•	•
<p>The most accurate, GNSS correction source available from Raven.</p> <ul style="list-style-type: none"> <li>• Sub-inch accuracy and repeatability and faster convergence times</li> <li>• Base station or CORS network required</li> </ul>					
SLINGSHOT RTK <i>(600S, RS1, Envizio Pro II, Phoenix 300 w/USB, Viper 4/4+)</i>	2.5 cm	2.5 cm	< 5 min	•	
<p>Receiver can maintain centimetre-level positioning accuracy for outages in RTK correction messages (i.e. loss of cellular or radio connection).</p> <ul style="list-style-type: none"> <li>• Provides RTK level accuracy for up to 20 minutes of correction outage</li> <li>• Operates seamlessly in the background</li> </ul>					
RTK-L <i>(RS1 only)</i>	--	--	< 30 min		•

# RTK-L

## RTK FALL BACK

IDEAL



# GPS FEATURES AND OPTIONS

## PRICES

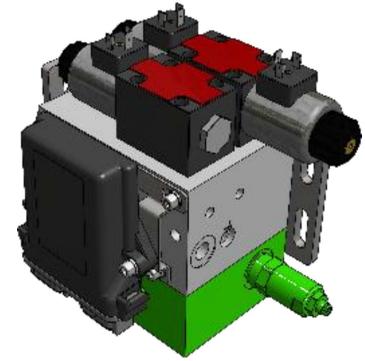
Part Number	Description	List Euro
<b>1-077-0180-236</b>	CODE, AUTH UPGRADE 500S GS-LITE	€870
<b>1-077-0180-245</b>	CODE, AUTH SUBSCRIPTION 3MON GS 500s	€480*
<b>1-077-0180-237</b>	CODE, AUTH SUBSCRIPTION 1YR GS 500s	€1110*
<b>1-077-0180-238</b>	CODE, AUTH SUBSCRIPTION 3YR GS 500s	€3030*
<b>1-077-0180-239</b>	CODE, AUTH SUBSCRIPTION 5YR GS 500s	€4725*
<b>1-077-0180-137</b>	CODE, AUTH SATELLITE GS 3 MONTH 600s –RS1	
<b>1-077-0180-139</b>	CODE, AUTH SATELLITE GS 1 YEAR 600s – RS1	€825*
<b>1-077-0180-156</b>	CODE, AUTH SATELLITE GS 2 YEAR 600s – RS1	
	CODE, AUTH SATELLITE GS 3 YEAR 600s – RS1	
	CODE, AUTH RTK-L YEAR RS1	



STEER READY



SMARTRAX MD



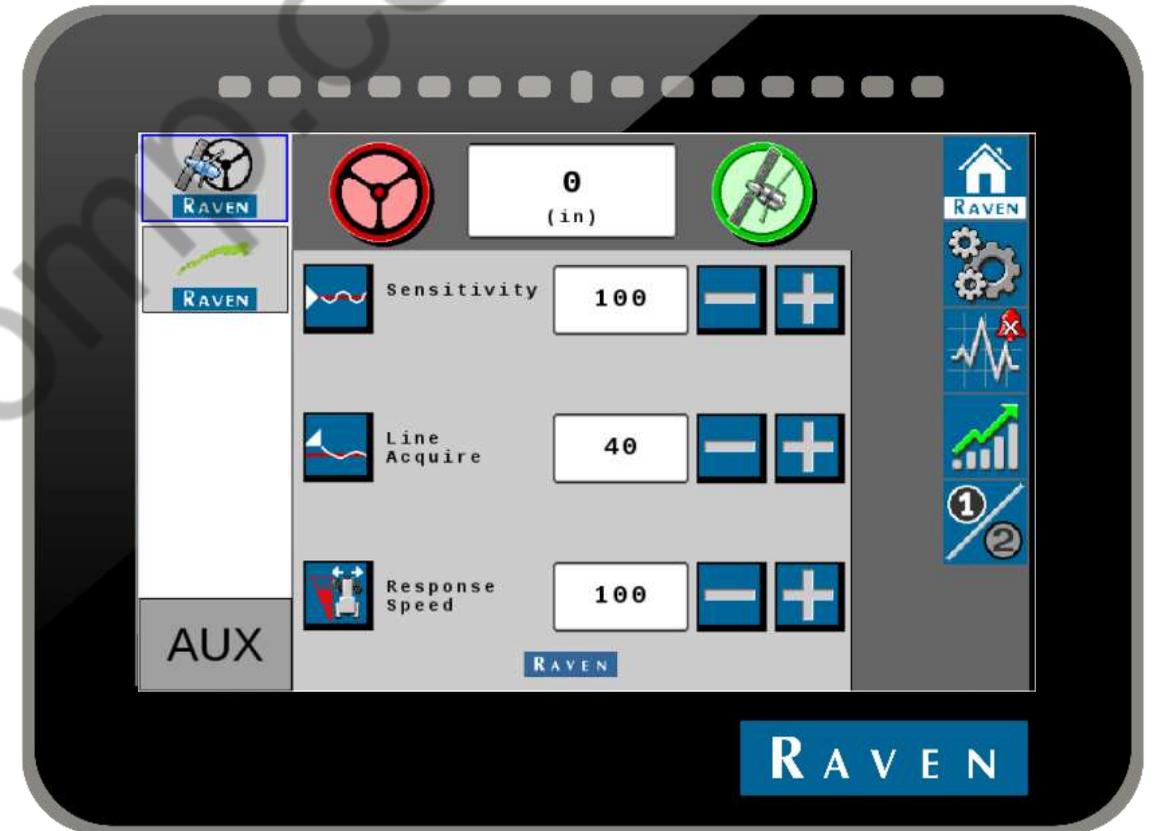
HYDRAULIC

## STEERING OPTIONS

# AUTO-STEERING

## FEATURES

- Speed ranges
  - EGNOS, Satellite GS 0,54 km/h
  - RTK 0,072 km/h
- High quality 3D gyro module
- Continuous reverse steering
- Improved steering performance
- Improved line acquire



RAVEN

# STEER-READY

## SUPPORTED PLATFORMS

- NH IntelliSteer
- Case AccuGuide
- Steyr S-Tech
- John Deere Autotrac Ready
- Fendt VarioGuide
- MF AutoGuide
- Valtra AutoGuide
- Challenger(Fall 2019)
- Deutz Fahr AgroSky(Spring 2019)
- Claas Autopilot(Spring 2019)
- Agrifac
- Amazone
- JCB(Spring 2019)

**FENDT**



JOHN DEERE

**STEYR**

**CASE IH**  
AGRICULTURE

**agrifac**

*Challenger*



MASSEY FERGUSON

**CLAAS**

**VALTRA**



**RAVEN**



## SMARTRAX MD

### THE FLEXIBLE STEERING SOLUTION

- High torque for faster operating speeds, line acquisition and online performance
- Machine specific installation kits
- Original steering wheel
- Easy exchange between vehicles



RAVEN



# PRICING

## PRICING – CR7 ISOBUS CONFIGURATIONS

Part description	Price	Tractor <u>with</u> 9-pin ISO in-cab connector		Tractor <u>without</u> Isobus cabling	
					
CR7 display with ISO-VT	€ 1.350	1	€ 1.350	1	€ 1.350
Installation kit CR7	€ 255	1	€ 255		
Cable CR7 to 9P In-Cab ISO	€ 100	1	€ 100		
Manual guidance kit	€1325			1	€ 1325
<b>Total:</b>			<b>€ 1.705</b>		<b>€ 2.675</b>
<b>Options:</b>					
ISO TC unlock	€ 740				
+ 500S Antenna(in kit)	€ 500				
+ 600S Antenna(In kit)	€ 1.600				