

## Machine Control

Learn more about our products that allow the use of precision agriculture in cultivation, harvesting and transportation operations.





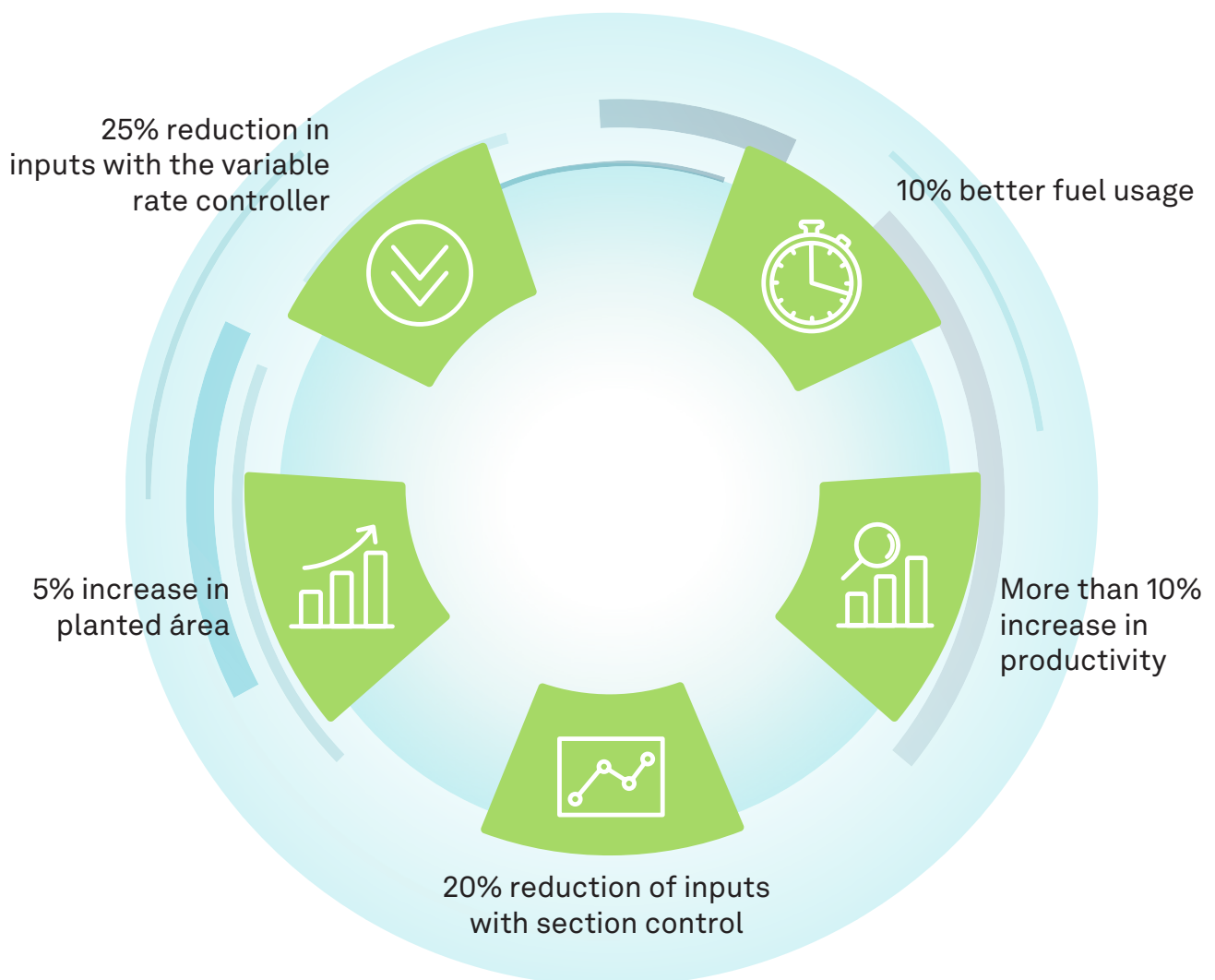


# Digital Reality in field

Hexagon has the most complete solution for precision agriculture. Our products work to monitor and manage operations and automate tractors, machinery and equipment. This solution works in different phases of the agricultural and forestry process, from soil preparation, planting, cultivation to harvesting and raw material transportation.

The products ensure quality and efficiency throughout the entire process, helping the operator perform tasks with the utmost accuracy. In addition, the products are able to offer cost reduction in operations with work area optimisation and the smart use of resources and inputs.

Understand how precision farming increases the profitability of your business\*:



*\* values may vary according to working accuracy*

# Learn more about our HxGN AgrOn products

## AgrOn Guidance

*Orientation system to maintain alignment with tractors, machinery and agricultural and forestry equipment while executing routes.*

- Precision in every operation – straight lines, curves and pivots
- Multiple options of orientation
- Ability to upload map file to system for guidance
- Ability to mark objects on the map



## AgrOn Auto Steering

*Automated precision navigation system for tractor, machinery and agricultural and forestry equipment.*

- Compatible with electric or hydraulic activation, and also with steer ready tractors\*
- Correction system for slope and abrupt maneuvers
- Ability to work in straight lines, curves and pivots
- Adaptability to most tractors on the market
- High performance guaranteeing better adjustment to the route
- Possibility of loading lines projected in the office

\*Check available accuracy for each model.

## AgrOn Planting Control

*Automated planter control system.*

- High precision controller
- Controls up to five simultaneous inputs, one of seed, three of fertilisers and one of liquids
- Calibration and simple operation
- Fixed and variable seed rate planting
- Monitors and controls each section of seed or fertiliser



## AgrOn Seedling Marker

*Generates maps of seedlings and pits through georeferencing for forestry operations.*

- Activation of the points through analog or digital sensors
- Facilitates irrigation and fertilisation in each seedling through georeferencing markings



## AgrOn Planting Monitor

*Seed spacing monitoring system.*

- Improved calibration with simple setup
- Measures seed population
- Night planting ability
- Reduction of application failures
- Prevention of over-planting



## AgrOn Subsoiling Control

*Automated subsoiling depth monitor system.*

- Simple calibration and operation
- Allows visualisation of measurements during operation
- Registers detailed operating information

## AgrOn Bait Control

*Automated control system for application of formicidal baits in forestry operations.*

- Monitors and controls the application of formicidal bait (1, 2 or 3 actuators)
- Export maps of systematic georeferenced application
- Enables localised application and georeferencing of ant nests



## AgrOn Sprayer Control

*Automated control system for spray sections during application.*

- Automatic control of the spraying section
- Enables manual control of sections
- Enables automatic section closure
- Allows installation with various valve assemblies
- Monitors and controls the application of up to 2 liquid inputs in up to 16 sections



## AgrOn ISOBUS Display

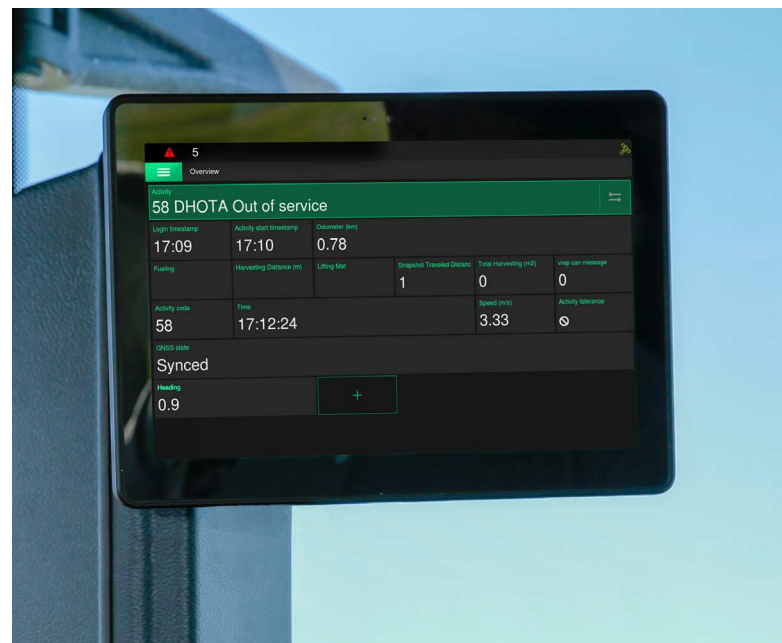
*Standard connection between display, electronic systems, implements and machines.*

- Includes the Universal Terminal (UT) and the Task Controller (TC)
- Has TC-BAS, TC-SC and TC-GEO capabilities
- Plug-and-play installation on steer ready machines
- Possibility of section shutdown and control at fixed and variable rate
- Activity logging and telemetry
- Works on agricultural and forestry machinery
- Integrated with Ti7 or Ti10 display

## AgrOn Machine Monitoring

*Monitoring system for machines and fleets in the field.*

- Read RPM and/or similar parameters of the machine
- Time and downtime monitoring
- Speed information of the operation on the onboard controller
- Integration with pre-existing sensors of the machine
- Allows you to configure alarms
- Integrated with software to register operations

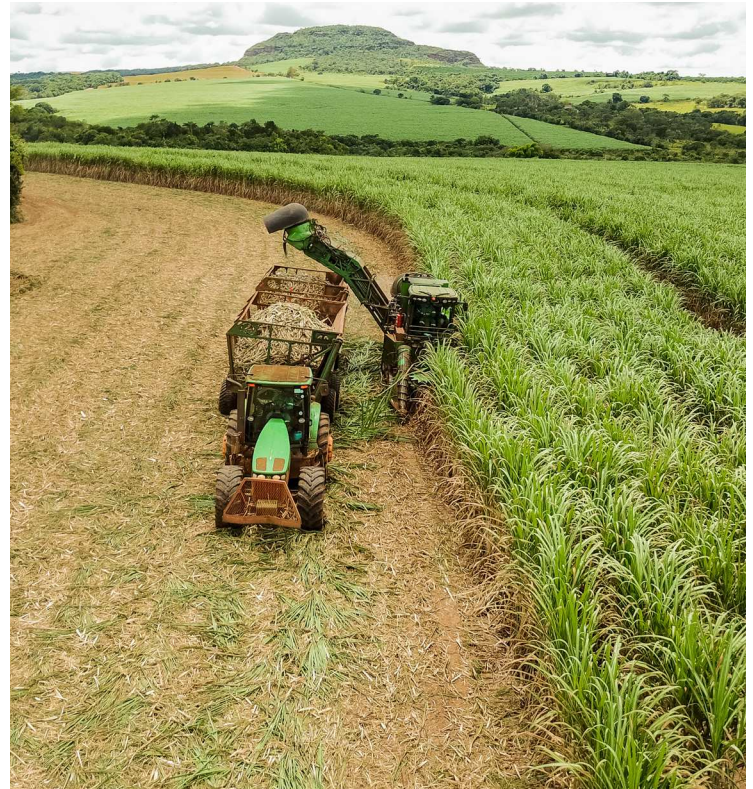




## AgrOn Haul-Out Dynamic Allocation

*Synchronised system for allocation of haul-out transporter and the cutting pace of harvesters.*

- Indicates the ideal moment for moving a haul-out tractor assembly to a harvester
- Considers distances, paths and times of movement on the cutting front
- Increases the total time of operation of harvesters, due to the reduction of the waiting time by available haul-outs



## AgrOn Fertilisation Control

*Automated control system for fertiliser and limestone applications.*

- Possibility of installation on track and electric variable rate
- Calibration and simple operation
- High precision controller
- Visualisation during operation
- Detailed operation information records
- Monitors and controls the application of up to three solid inputs
- Import maps (.shp) previously defined in the office
- Section shutdown on hydraulic motors

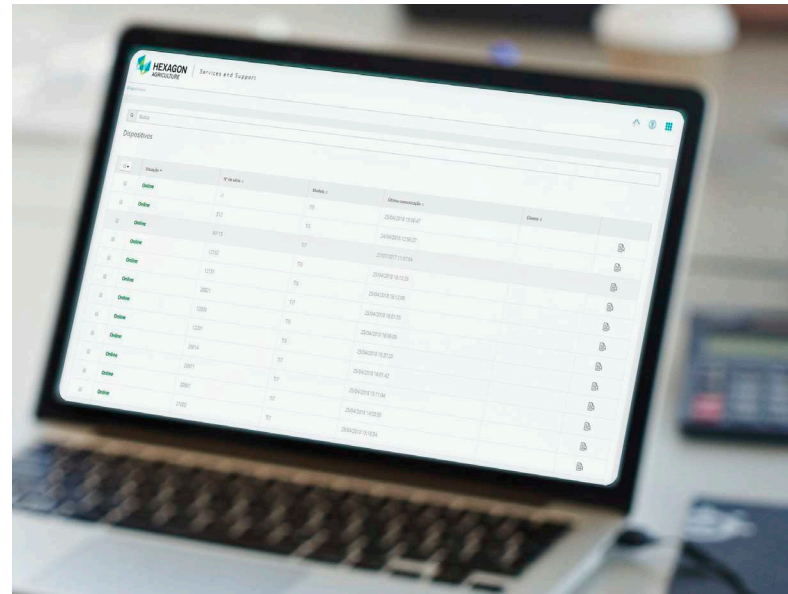


## Add-on module

### Remote Access

*System for remote access to displays for technical assistance and calibrations.*

- Remote monitoring of the machine
- Ensures fast, efficient and cost-effective service
- Provides control of the display for quick service
- Accepts different Internet connections: cable, Wi-Fi, 4G, 3G and even 2G



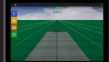


## Ti5, Ti7 and Ti10 displays

Onboard controllers allow users to use Hexagon's products for precision farming. They are compatible with several machines on the market and attend the needs of each customer, making it possible to include only one or even all products in a single equipment.

Characteristics	Ti5 	Ti7 	Ti10 
Screen size	5" LCD	7" LCD	10.1" LCD
Processor	Single core 800 MHz 1x ARM Cortex-A9	Single core 800 MHz 1x ARM Cortex-A9	Quad Core 1.2 GHz 4x ARM Cortex-A35
Storage capacity	RAM: 1 GB DDR3 FLASH: 4 GB eMMC	RAM: 1 GB DDR3 FLASH: 4 GB eMMC	RAM: 2 GB DDR3 FLASH: 32 GB eMMC
Screen configuration	16M colours, 600 cd/m2 brightness and 600:1 contrast	265K colours, 1000 cd/m2 brightness and 400:1 contrast	16Mcolors, 1000 cd/m2 brightness, 800:1 contrast
Resolution	800x480	800x480	1280x800 (HD)
Display size	162 mm (W) x 125 mm (H) x 45 mm (L)	208 mm (W) x 159 mm (H) x 57 mm (L)	177 mm (W) x 250 mm (H) x 47 mm (L)
Sturdy aluminium case	Yes	Yes	Yes
High contrast and configurable lighting for different visibility conditions	Yes	Yes	Yes
Brightness sensor for adjustment of screen brightness	Manual	Manual	Automatic
Camera	No	No	5MP Front Camera*
Audio system with built-in speaker and microphone	No	No	2W speaker Front microphone for audible alerts
Multi-language support	Yes	Yes	Yes
Wi-Fi 2.4GHz*	No	Optional	Yes
Record of detailed information of operations and export/transmission of files	Yes	Yes	Yes
Digital Radio 900MHz or 433Mhz*	No	Optional	Optional
4G+ cell phone with 28 band support (700MHz)*	No	Optional	Optional
Bluetooth	No	Optional	Bluetooth 4.2
User Entry	Touch screen and Power button	Touch screen and Power button	Touch screen and Power button
Battery	-	-	Li-Ion 4.900 mAh*
ISOBUS	No	Yes	Yes
Quantity of products per equipment**	Up to 3	No limit	No limit
External map reading in shape (.shp) format, prepared in the office	Yes	Yes	Yes



Characteristics	Ti5 	Ti7 	Ti10 
Protection Index	IP65	IP64	IP66, IP67
Power supply	12Vdc	12Vdc	12Vdc
Operating temperature	-20°C to 60°C	-20°C to 60°C	-20°C to 70°C
Storage temperature	-30°C to 80°C	-30°C to 80°C	-30°C to 80°C
Interfaces	USB (x1), CAN (x1) and RS-232 (x1)	USB (x1), CAN (x2) and RS-232 (x2)	USB (x2), CAN (x3) and RS-232 (x2)
Certifications	CE, RCM, RoHS, WEEE	ANATEL, CE, RED, RCM, RoHS, WEEE	ANATEL, CE, RED, RCM, RoHS, WEEE

\*check the communication available for each model  
 \*\*Ti5 compatible with AgrOn Electric Auto Steering, AgrOn Guidance and a product to choose from

## Farming Accuracy

- GNSS L1 10Hz - GPS with EGNOS/WAAS 15-20cm (pass to pass, 15min)
- GNSS L1 20Hz - GPS with EGNOS/WAAS 15-20cm (pass to pass, 15min)\*
- GNSS L1 10Hz - GPS/Glonass 28cm (pass to pass, 15min)
- GNSS L1/L2 20Hz - GPS/Glonass 15cm (pass to pass, 15min)
- GNSS L1/L2/Lband 20Hz - GPS/Glonass/TerraStar 2,5cm (absolute)
- GNSS L1/L2 20Hz - GPS/Glonass/RTK 2 cm (absolute)

\* Exclusive frequency for the Ti10 display

## Operation mode

A-B Line

A + Heading

Parallel A-B Curve

Adaptative Curve

Pivot



Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon's Agriculture division provides technologies that convert data into intelligent information that enables smart planning, efficient execution, precise machine controls and automated workflows that optimise operations and increase profits.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.8bn Euro.

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