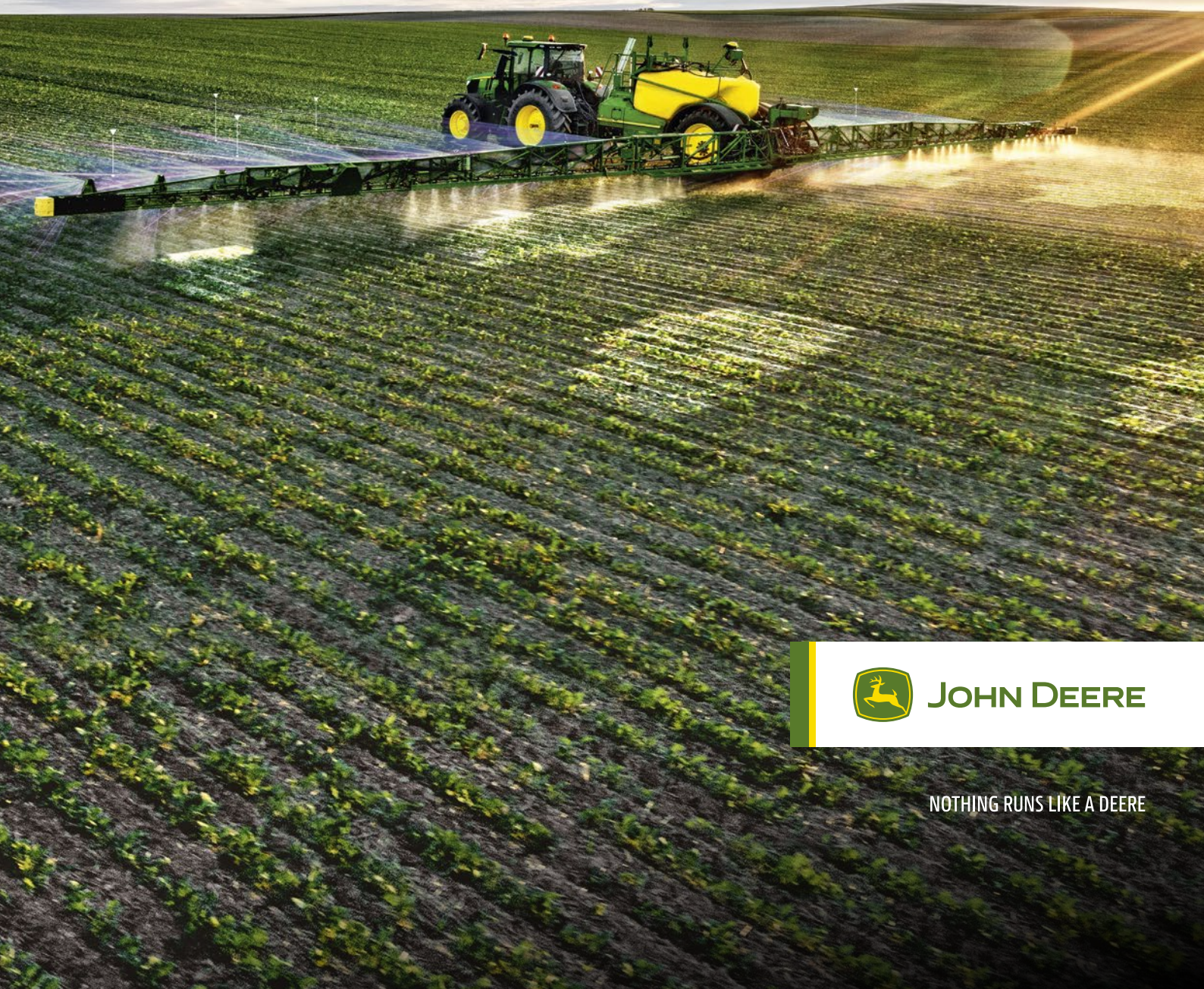


# SEE & SPRAY™ SELECT

SUSTAINABILITY WITH A PROFIT EDGE



**JOHN DEERE**

NOTHING RUNS LIKE A DEERE

# READY FOR BETTER

INTRODUCING SEE & SPRAY™ –  
PRECISION AGRICULTURE REDEFINED

In any business, doing more with less is a compelling goal. In farming, it is also becoming a necessity. John Deere's See & Spray™ technology will help you get there faster with less effort.



## **FEWER RESOURCES, BETTER BUSINESS**

The European Green Deal 2030 targets a 50% reduction in pesticide use. That may seem like a tall order. But it is entirely achievable with the groundbreaking precision technology at the heart of our See & Spray™ Select solution, which is coming to our R900i Series trailed sprayers.

## **LOWER COSTS, SAME EFFICACY**

See & Spray™ herbicide application technology precisely targets only areas requiring treatment. You'll decrease chemical use, potentially lower costs by up to 70%, and reduce environmental impact – while maintaining perfect application records and achieving the same 98% weed hit rate of broadcast spraying.



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## TECHNOLOGY EVOLUTION

See & Spray™ is the latest step in the evolution of spraying technology which started with broadcast application at the field level and now reaches breakthrough precision at the level of individual plants.



**FIELD**  
Broadcast



**ZONE**  
Section Control Broadcast



**ROW**  
Individual Nozzle Control & ExactApply™



**PLANT**  
Targeted spraying See & Spray™

# THE SUSTAINABILITY SOLUTION

## HOW SEE & SPRAY™ WORKS AND WHAT YOU NEED

Easy to set up in the familiar G5<sup>Plus</sup> display and integrated into the comprehensive John Deere ecosystem of precision agriculture tools, See & Spray™ emerges as a connected click-and-go sustainability solution.



### BOOM HEIGHT CONTROL SENSOR

The Terrain Command Pro system operates in a range from 30cm to 120cm to ensure the boom stability required for proper image quality and effective system operation.



### WHITE BALANCE CAMERAS

There's one on each boom wing to ensure ambient lighting is sufficient for effective system operation, and will switch on the optional lights as required.



### IMAGE PROCESSORS

Five processors control eight cameras and operate sixteen nozzles.



### CAMERAS

There's a camera array on each boom, with one fully integrated camera every meter along the boom.

## REAL-TIME PRECISION

The See & Spray™ system uses advanced computer vision and boom cameras that continuously capture images of the field. Image processing modules (IPM) analyse them in real-time. When an IPM identifies a green patch on brown soil or between row crops, the respective nozzles will apply the product only to the detected zone, reducing the amount of herbicide required. That process has the potential to lower your costs by up to 70%, minimise chemical runoff, and promote healthier soil.

## BRINGING IT ALL TOGETHER: ONE INTEGRATED SOLUTION

The See & Spray™ Select solution fuses several existing John Deere technologies into a powerfully precise sustainability solution.

- Solution system - PowrSpray™, direct rate control Single Product
- Application Technology such as Terrain Command Pro and Individual Nozzle Control Pro - Pulse Width Modulation
- Precision Ag Solutions like our G5 Display, StarFire™ Receivers, as well as JDLink™ real-time data collection to ensure all data are available in the John Deere Operations Center™



## HOW TO SPOT A WEED

The See & Spray™ components empower the software to achieve the 98% hit rate of broadcast application with a fraction of the herbicide usually required with conventional application.



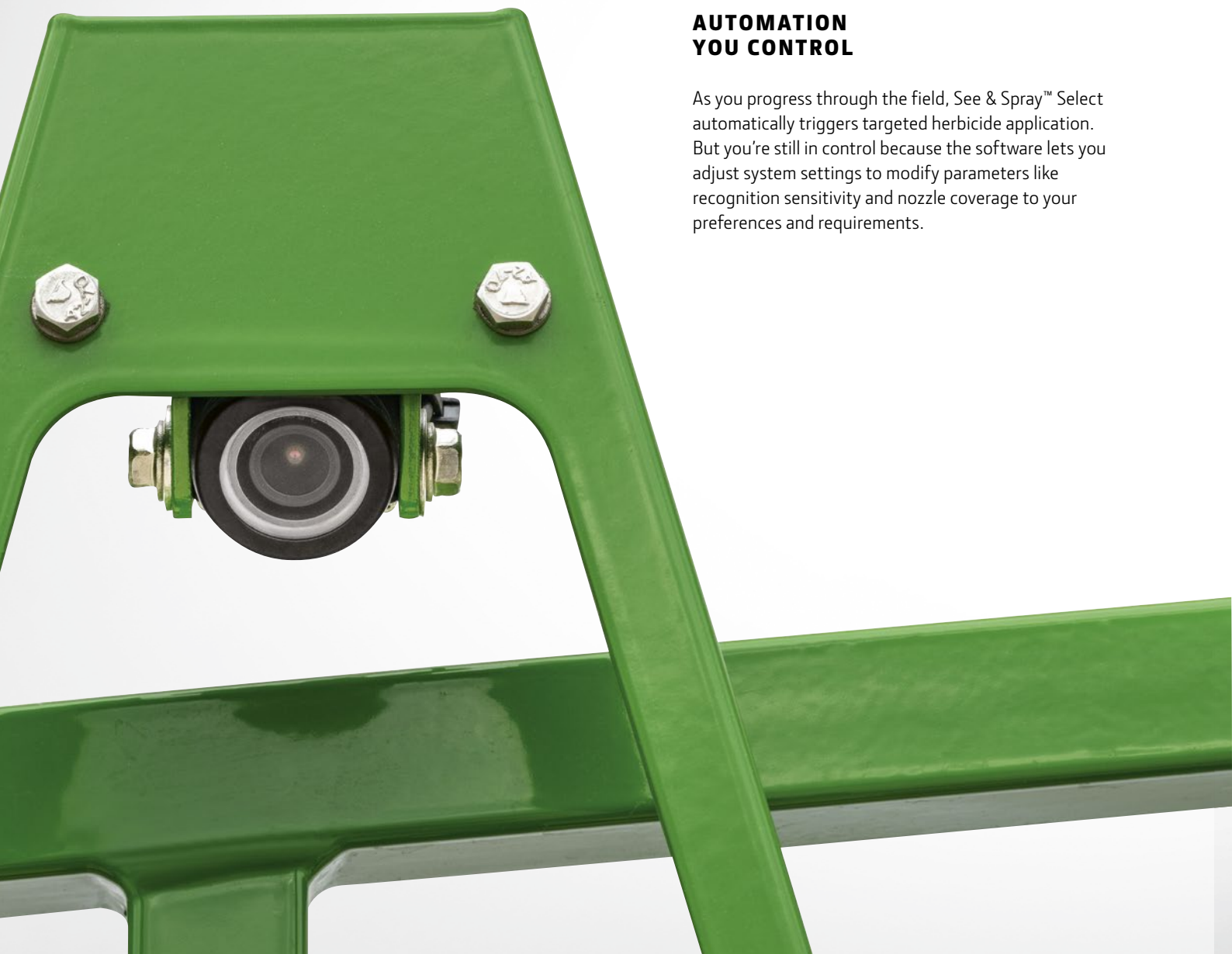
# PRE-EMERGENCE PRECISION

EFFORTLESSLY EFFECTIVE

Ideal for row crop farmers managing weed pressure on fallow hectares, See & Spray™ Select will reduce your input costs and battle herbicide resistance.

## **AUTOMATION YOU CONTROL**

As you progress through the field, See & Spray™ Select automatically triggers targeted herbicide application. But you're still in control because the software lets you adjust system settings to modify parameters like recognition sensitivity and nozzle coverage to your preferences and requirements.



## SPRAY SENSITIVITY



## NOZZLE COVERAGE

See & Spray™ Select software is easy to set up and use in the G5 display with which you are already familiar.

## GROUNDBREAKING RESULTS

We have extensively tested See & Spray™ Select on over 1,000,000 hectares globally. Depending on various factors, you can confidently expect 40 - 70% herbicide input savings while maintaining the same 98% weed hit rate achieved with broadcast spraying.



# IN-SEASON EXCELLENCE

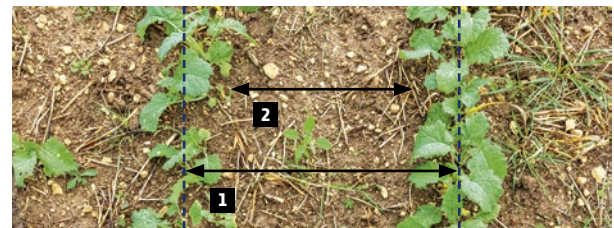
## POST-EMERGENCE WEED DETECTION IN ROW CROPS

See & Spray™ Select helps you reduce input costs and more effectively battle herbicide resistance in sugar beets, potatoes, rapeseed, sunflowers, and other row crops.



### BREAKTHROUGH DETECTION ACCURACY

Our post-emergence technology is based on the same hardware and software as our pre-emergence product. However, a more complex algorithm is required to differentiate weeds growing between rows from the row crops. During pre-emergence, detection is more straightforward, as the distinction between soil and a green plant is not as hard to recognise. For in-season spraying, however, the system must be trained to distinguish between the green crops in a row and the green weeds in between. Given this added complexity, the results are all the more impressive.



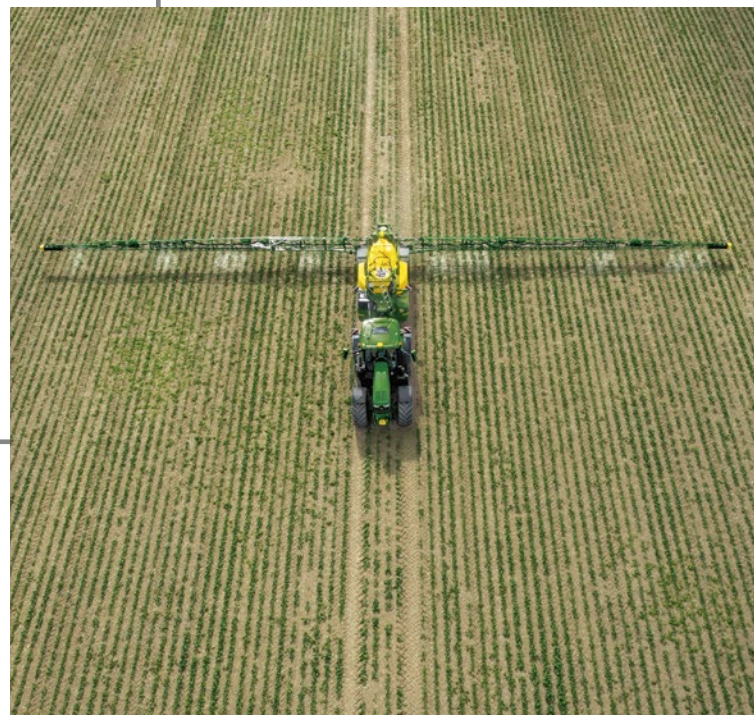
**1 | ROW WIDTH**  
from 0,25m to 1m

**2 | MAXIMUM PLANT COVERAGE**  
50% of the inter-row width



## IN-SEASON INTELLIGENCE RESULTS

Ongoing university research confirms that See & Spray™ in-season row crop performance is just as groundbreaking as our pre-emergence technology. Depending on factors like operating speed, field conditions, weed pressure, field location and others, you can look forward to potential herbicide savings of 30 – 70%, with outstanding weed hit rates of 95 – 98%.



# EMPOWERED FARMING

SEE & SPRAY™ IN THE JOHN DEERE OPERATIONS CENTER™

Connect your See & Spray™ system with the John Deere Operations Center™ through JDLink™ to synchronise essential environmental, technical, and agronomic data for advanced analytics accessible via smartphone app.

## ANALYSIS-POWERED ACHIEVEMENT

Once it is in the John Deere Operations Center™, you can analyse your data with your team and advisors for smarter strategic planning. Access detailed maps of herbicide applications, savings calculations, and effortlessly create reports for regulators. You'll know your fields and your business better: where the weeds are, how much chemical product you need, how much you save, and how that affects your profitability.



## SPECIFICATIONS

### SEE & SPRAY SELECT™

#### HARDWARE

Cameras	1 per meter - 30 frames per second, fully integrated into the boom
Image processor	1 for 8 cameras - uses images from camera to detect green
White balance camera	1 on each side - to detect ambient light
Boom height control sensor	TerrainCommand Pro

#### MANDATORY SOLUTIONS

G5 <sup>Plus</sup> Display	■
TerrainCommand Pro	5 sensors
JDLINK™ - MTG module on the sprayer	■
Boom suspension for hilly terrain	■
Individual Nozzle Control Pro	■

#### CAPACITY

Pre-emergence application, fallow ground	■
Post-emergence application, row crops from 0.25m to 1m row width	■
Max. speed of application	12km/h

#### SPRAYER

Available on R900i Series	36m boom width, 50 cm nozzle spacing
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#### OPTION

LED working lights for low light conditions	1 LED light per meter
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Chances are that when you need us, you need us right then and there. For advice, to solve a problem, or for a part. Reach out, we'll be there with technicians who are factory trained, ready to go to work for you, using only genuine John Deere parts and products. But our commitment to quality doesn't stop at your machine – we also have financing options available that are guaranteed to fit your budget and your plans.



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