

HY RATE PLUS™

LED Seed Sensor



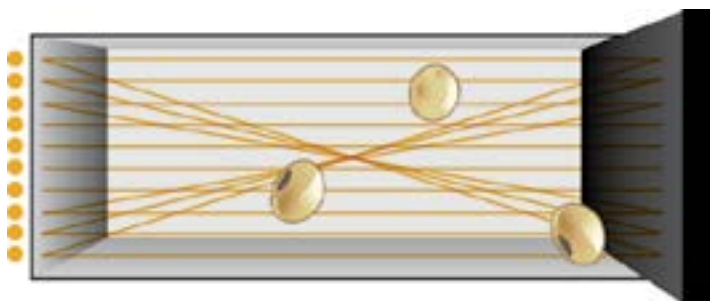
High counting accuracy across multiple seed types with improved performance in the presence of dust.

The Hy Rate Plus™ LED Seed Sensor is the sensor of choice for all seed types regardless of size, shape and seeding rate. From larger seeds such as corn to small seeds like canola, the Hy Rate Plus™ accurately counts seeding population during planting, providing confidence that your row units are working properly and seeds are being placed for optimum yield potential.

Eliminate Seed Sensing Dead Zones

Optical seed sensors work under the principal of photo detection. Light emitting diodes (LEDs) create a thin field of light across the interior of the seed tube. A photo detector on the opposite side of the tube continuously monitors the intensity of the light. Any seed that disrupts the sensing zone's light source is detected by the photo detector cell and the corresponding seed pulse is communicated to the monitor.

Typical seed sensors use a small number of LEDs which are spaced far apart from each other. This results in areas where the light field is weak or non-existent. Seeds can hide in these dead zones and be falsely reported as skips. The Hy Rate Plus eliminates this by utilizing 2-3 times more LEDs than any other sensor on the market today and by spacing these LEDs close together. This creates a more uniform light field and virtually eliminates dead zones.



Hy Rate Plus Light Field

Utilizes many LEDs with virtually no gaps, creating a large light field and virtually zero sensing dead zones. The photodetector covers the entire width of the seed tube.

HY RATE PLUS™

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Obtain High Accuracy on Multiple Seed Types

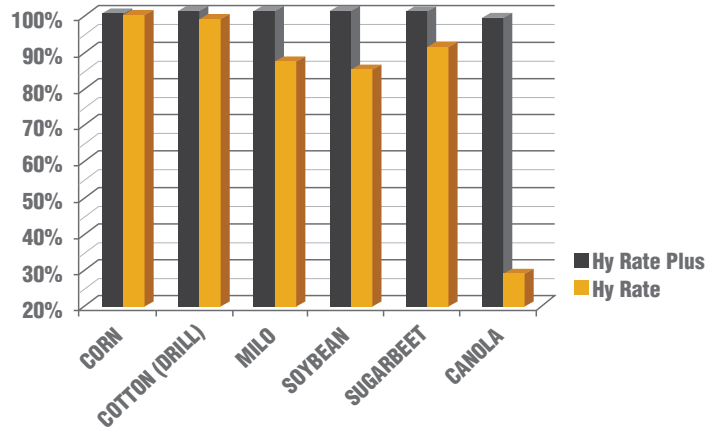
The Hy Rate Plus™ utilizes a proprietary software algorithm that allows the sensor to quickly learn what seed type is being planted and adjusts its detection sensitivity accordingly. This provides for better seed counting accuracy across the widest range of seed sizes. The sensor also automatically adjusts detection sensitivity in dusty conditions. This allows the sensor to effectively distinguish seeds from dirt, dust and debris which results in better counting accuracy even on windy days.

Features and Benefits

- Accurately monitors seeding rates between 1–135 seeds/sec across multiple seed types for uncompromised accuracy
- Ability to distinguish doubles, triples and quad seed drops to maintain accurate population count
- Compensates for the effect of wind and dust allowing you to plant on windy days
- Utilizes a uniform light field with virtually zero dead zones in the seed tube, eliminating false skips
- Field programmable for software improvements and upgrades
- Informs operator when adjustments are required to maintain optimum planter performance with per-row data (% Singulation, % Multiples, % Skips, Spacing Quality) when utilizing the IntelliAg™ Working Set Member 2 (WSMB2) seed singulation module
- Uses a 3-Pin Weather Pak connector for direct connection to existing planter row harnessing
- Compatible with existing DICKEY-john® PM series planter monitors, IntelliAg™ AI series controllers and the IntelliAg™ MVT
- Compatible with most OEM planter monitors in use with older DICKEY-john® seed sensors

Backed by the power of DICKEY-john:

When you buy a DICKEY-john Hy Rate Plus™ you get all the dependability and value you expect from DICKEY-john products. Like all DICKEY-john products, the Hy Rate Plus is designed, manufactured, and supported in the USA.



Specifications

Sensor Dimensions

- Photo Detector Module – 5.6" (14.2cm) long x 1.1" (2.8cm) wide x .65" (1.65cm) deep
- LED Module – 2.37" (6cm) long x 1.16" (2.9cm) wide x .49" (1.3cm) deep

Electrical

- Operating Voltage – 7.5 VDC minimum to 8.75 VDC maximum
- Operating Current – 75 mA

Connector – 3 Pin Weather Pak

- Pin A – Green Wire – Signal
- Pin B – Black Wire – Ground
- Pin C – Red Wire – Supply Voltage

Environmental

Conforms to DICKEY-john Environmental Standard for voltage, vibration, thermal shock, physical shock, jet spray, humidity, temperature, chemical, salt spray, emissions, radiated immunity, solar radiation, electric static discharge, jump start, altitude.

CE marked and conformance

The Hy Rate Plus LED Seed Sensor is designed specifically for use on newer models of OEM planter row units. Call your DICKEY-john dealer or DICKEY-john Corporation to determine if this sensor is compatible with your planter.