

# CropScan 3300H **ON COMBINE GRAIN ANALYSER Optimise Yield in the Field** trttita H PROTEIN YIELD -31% 旍 166t 10.7%

### **REAL TIME**

# **GRAIN QUALITY**

The CropScan 3300H On Combine Grain Analyser measures Protein, Moisture, Oil, Starch and Fibre in grains and oil seeds every 5 to 8 seconds as they are harvested in the field. The CropScan 3300H comprises of a Sampling Head, a Fibre Optic Cable, a NIR Spectrometer and a CropScan display. As grain passes up the clean grain elevator, grain fills the remote sample head and the NIR scan is collected. The results for Protein, Moisture, Oil, Starch and Fiber are displayed on the CropScan display in the form of Field Data, Field Maps, Graphs, Tank Data, Field and Site Storage Data which are then synced to the user's CropScanAg Cloud Account. The data enables farmers to make better decisions regarding when to start harvest, blending grain and improving Nitrogen management practices across the farm.



#### Accurate Moisture Readings

Accurate Moisture measurements mean farmers can harvest for more hours each day and have confidence in every load of grain delivered.



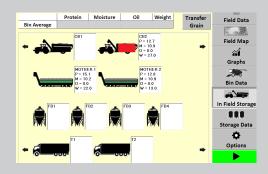
#### **Grain Logistics**

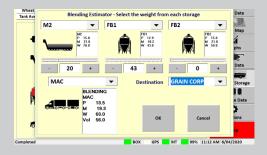
Optimise crop payments based on accurate Protein blending. The CropScan Grain Logistics software enables farmers to manage the quality and quantity of their grain from the field.

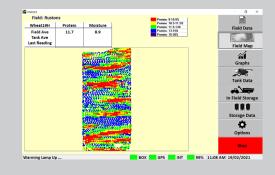


#### Nitrogen Management

The CropScan 3300H can assist farmers to achieve higher Nitrogen Use Efficiency (NUE) across their farm. Combining Protein and Yield data provides a more complete picture of Nitrogen Availability and Uptake across the field.







# **OPTIONAL** LICENCES & SUBSCRIPTIONS

Connectivity and integration modules to get your harvest equipment working together.



### SIM Card Subscription

An optional SIM Card Subscription simplifies the user connection process between the CropScan display and the CropScanAg Cloud. The SIM card is pre installed to the CropScan display and maintains a 12-month internet connection for data syncing, software and calibration updates. The user can renew the subscription via their dealer.

## CropScan Cart Weight Scales Integration Licences

The CropScan Grain Transfer operation can be simplified using the Cart Weight Scales integration feature. The Licence unlock allows users to connect to a Libra Cart, Digi Star and Elmer weight scales unit. The grain transferred from the combine's tank to the grain cart can be automatically read and recorded along with the Protein, Moisture and Oil averages for that tank. This feature improves the accuracy and traceability of grain transfers from the combine to other farm storage locations.



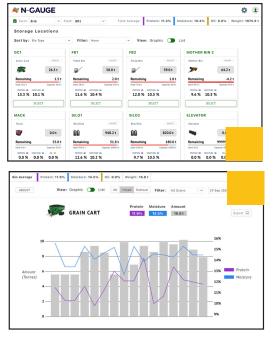
#### **CNHi CANBUS Integration Licence**

The CropScan to CNHI CANBUS Integration allows users to log the Yield data along with the Protein, Moisture and Oil data into the CropScan display. The CANBUS Integration enables the CropScan to generate yield maps and automatically populates the grain tank weight in the CropScan Grain Logistics screen thereby improving the grain transfer weight functions. The CANBUS integration feature brings the quality and quantity attributes together to improve on-farm grain logistics and nutrient management planning for the next harvest.



#### IT'S TIME TO N-GAUGE YOUR DATA

The CropScanAg N-GAUGE Mobile App offers a subscription based suite of management tools for farmers to N-GAUGE their harvest data. The N-GAUGE Grain Logistic and Nutrient Manager modules can be accessed from any smart device. Connect and share data across the farm with your team and advisors. The sensor data for Protein, Moisture, Oil and Yield are collected during the harvest in the CropScan display. The data is pushed to the CropScanAg Cloud every cycle of the unloading auger. The updated data can then be visualized in the Grain Logistics and Nutrient Manager modules.

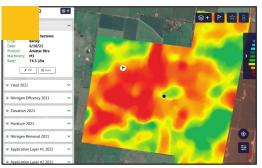




The CropScanAg N-GAUGE Grain Logistics App connects growers and their team with their Protein and Yield harvest data. The N-GAUGE App simplifies the operation of the CropScan 3300H and pushes data to the CropScanAg Cloud to allow other team members to view the quality and quantity of the grain across the farm storage locations. The Virtual Farm Storage screen shows the grain stored in each location, allowing the operator to:

- Transfer the load to and from the field bins, mother bins, grain bags, trucks, bin/silos, bunkers, sheds or to the end grain buyer.
- View current field averages and stack averages
- Split grain transfers across two storage locations
- Simulate grain blending across storage locations
- Create and email site storage reports





#### NUTRIENT MANAGER PROTEIN TO PRESCRIPTION

The N-GAUGE Nutrient Manager simplifies Variable Rate Fertilisation (VRF) prescriptions for growers by automatically generating the sensor layer data for:

- Protein, Moisture and Oil
- Boundaries and AB Lines
- Yield and Elevation
- Formulated layers for:
  - -Protein/Yield Correlation Quadrants (Field Performance Maps)
  - -Nitrogen, Sulphur, Phosphorous and Potassium Removal
  - -Nitrogen Use Efficiency (NUE)

The data can then be simply turned into an VRF prescription for N,P, K and S and sends them to the seeder or spreader.







## **OPTIMISE YIELD IN THE FIELD**

The CropScan 3300H measures Nitrogen in the form of Protein. Protein and Yield mapping provides a more complete picture of the Nitrogen Availability and Uptake in the field. Research shows that cereal crops with Protein content less than 11.5% have not reached their full Yield potential. Combining Protein and Yield maps identifies the zones across the farm where the Yield has been limited by Nitrogen. By using both Protein and Yield data, farmers can develop simple and accurate Variable Rate Nitrogen Applications to achieve the Sweet Spot for Protein and Yield. The "Sweet Spot" is when the Nitrogen application rates are sufficient to allow the crop to achieve the full Yield potential at the optimum Protein content. Over 11.5% Protein, the Yield does not increase and any surplus Nitrogen only goes to increase the Protein content of the grain. Protein can therefore be utilized as an indicator to optimise fertiliser application rates.

### **TESTIMONIALS**

#### Andrew Baldock — South Australia

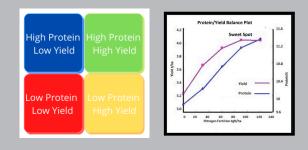
"Measuring yield and protein variation together across our paddocks allows us to clearly identify productive potential. The protein data adds another dimension to input management, we'll never be without it again."

#### Ben Cripps — Western Australia

"The CropScan is simple to use and simple to maintain. The information gathered benefits logistics and pricing at harvest then feeds into nutrition decisions for future years. CropScanAg have been great to deal with, taking on suggestions and ideas to improve the product continually to make it easier for the farmer to gain maximum benefit from their investment."

#### Matt Hill — Western Australia

"The only way to accurately manage nitrogen inputs is to measure grain protein. The CropScan On Combine Grain Analyser does this. By doing this it unlocks significant forgone yield potential, and therefor profit, with a huge payback on the initial purchase cost. It is the most important PA tool on my farm."



IF YOU CAN'T MEASURE IT, YOU CAN'T MANAGE IT

# TECHNICAL

### SENSOR

WAVELENGTH	720-1100nm
POWER	12VDC
SAMPLE SIZE	_400ml
CYCLE RATE	5-8 seconds
OPERATING TEMP	10-50 Degrees Celsius (50-122 Degrees Fahrenheit)
DISPLAY	10.1 inch Windows OS, 3 x USB 2 X RS 2322, SIM
CLOUD	CropScanAg Cloud API
PLATFORM TYPES	Case IH-New Holland-John Deere-CLAAS-AGCO
<u>GPS</u>	Not supplied - Combine Receiver required
WEIGHT	22kgs (48.5lbs)
SHIPPING	600 X 350 x 485mm (23.6 X 13.8 X 19.1 in)
APPLICATIONS	
CALIBRATION	PLS (Partial Least Squares)
PARAMETERS	Protein, Moisture, Oil, Starch and Fibre
CROP TYPES	Wheat, Barley, Durum, Canola, Corn, Soy Beans,
	Sorghum, Chick Peas, Lentils, Oats, Lupins, Rice.
	Other Grain Types available on request

