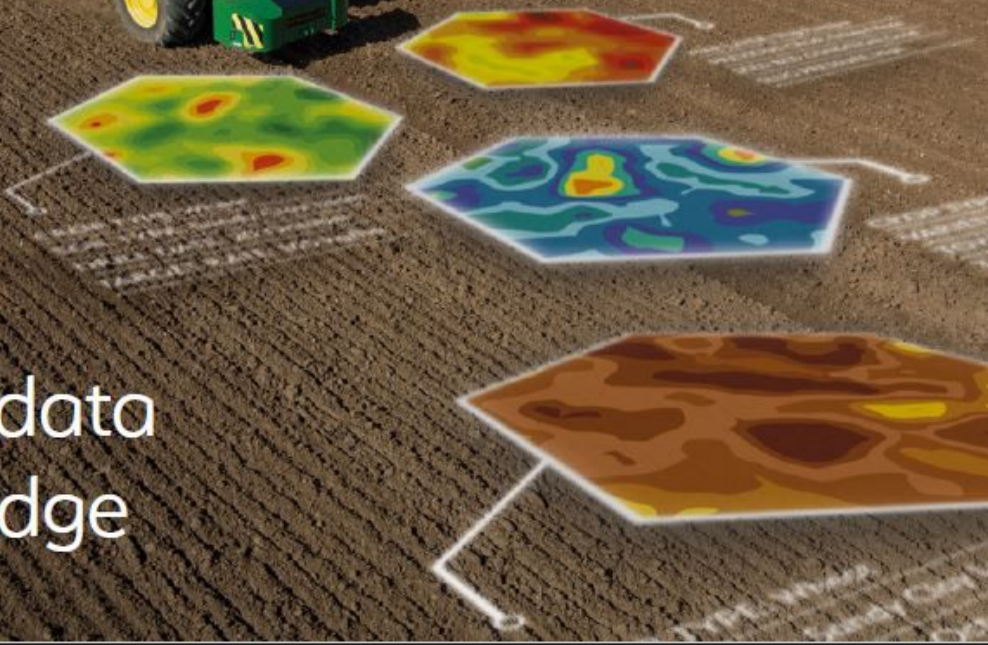




# Omnia

Digital Farming



➤ Translating data  
into knowledge



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➤ We have complete control of our data, the ability to plan and then fine tune prescriptions before they are issued is a must in our climate, Omnia delivers that and more.

Andrew Booth, Savock Farms, Aberdeenshire

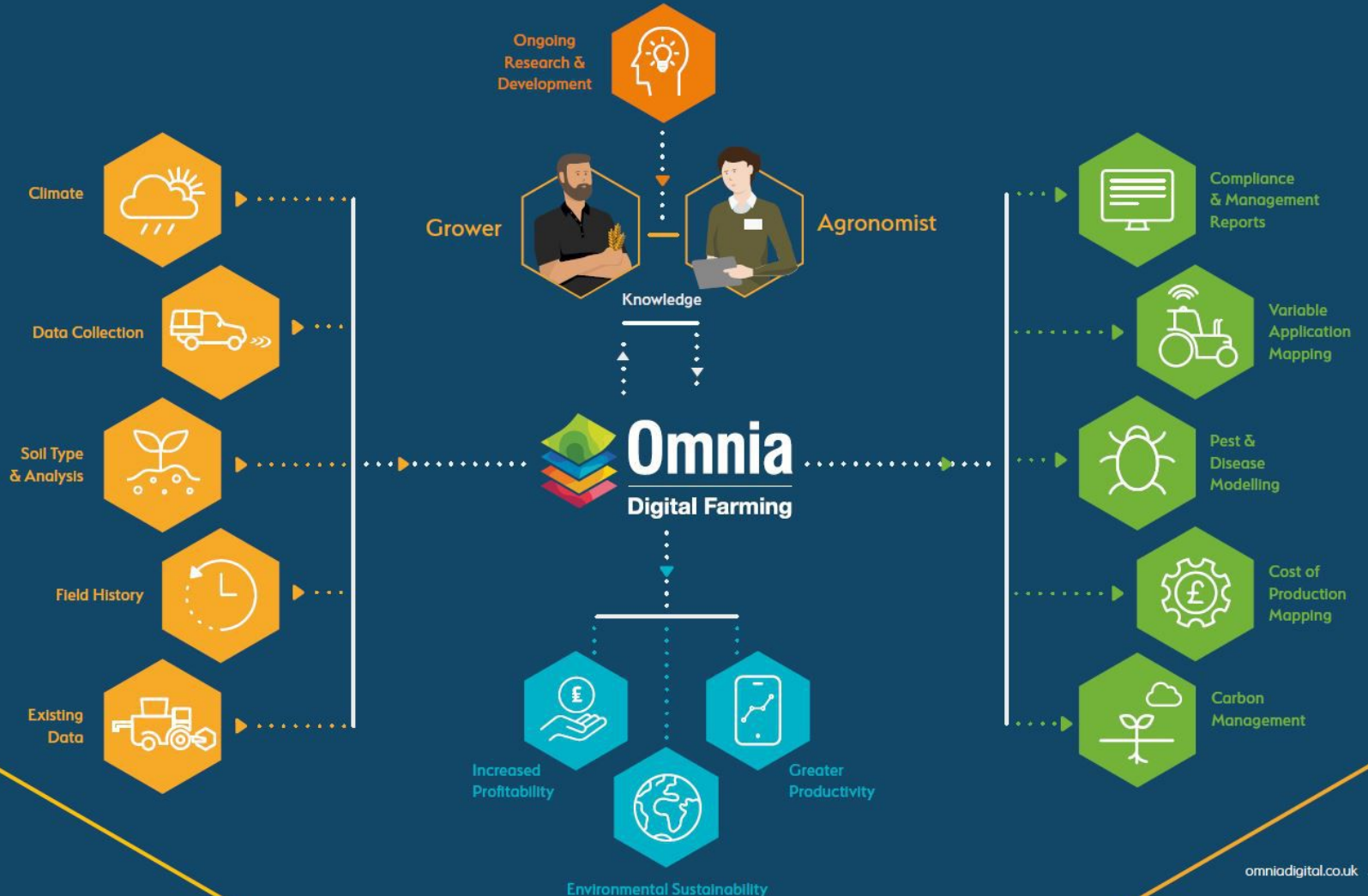


# Translating Data Into Knowledge

Developed with the grower and agronomist partnership in mind.

Omnia is a revolutionary digital farming system that analyses information from a variety of sources, for better informed decisions.

› Improving productivity, increasing profits and ensuring future sustainability





# Omnia Packages

Each service is tailored to your needs  
and can be delivered by a specialist.



## Omnia Access

### Free your data

A free service offering customised farm mapping and local weather data.

- ✓ Fields module
- ✓ Map layers
- ✓ Climate
- ✓ Data imports
- ✓ Omnia Scout - Access level



## Omnia Field Manager

### An integrated approach without precision technology

Complete set of reports including cropping plans, soil analysis, nutrient and fertiliser requirements.

- ✓ Everything in Omnia Access
- ⊕ Stocks module
- ⊕ Nutrition calculators including Nmax
- ⊕ NVZ compliance
- ⊕ Seed rate calculations
- ⊕ Reports
- ⊕ Historical climate data
- ⊕ Crop growth models
- ⊕ Pest and disease models
- ⊕ Satellite Imagery (NDVI/Chlorophyll/RGB)
- ⊕ Field Diary
- ⊕ Omnia Scout - Field Manager level

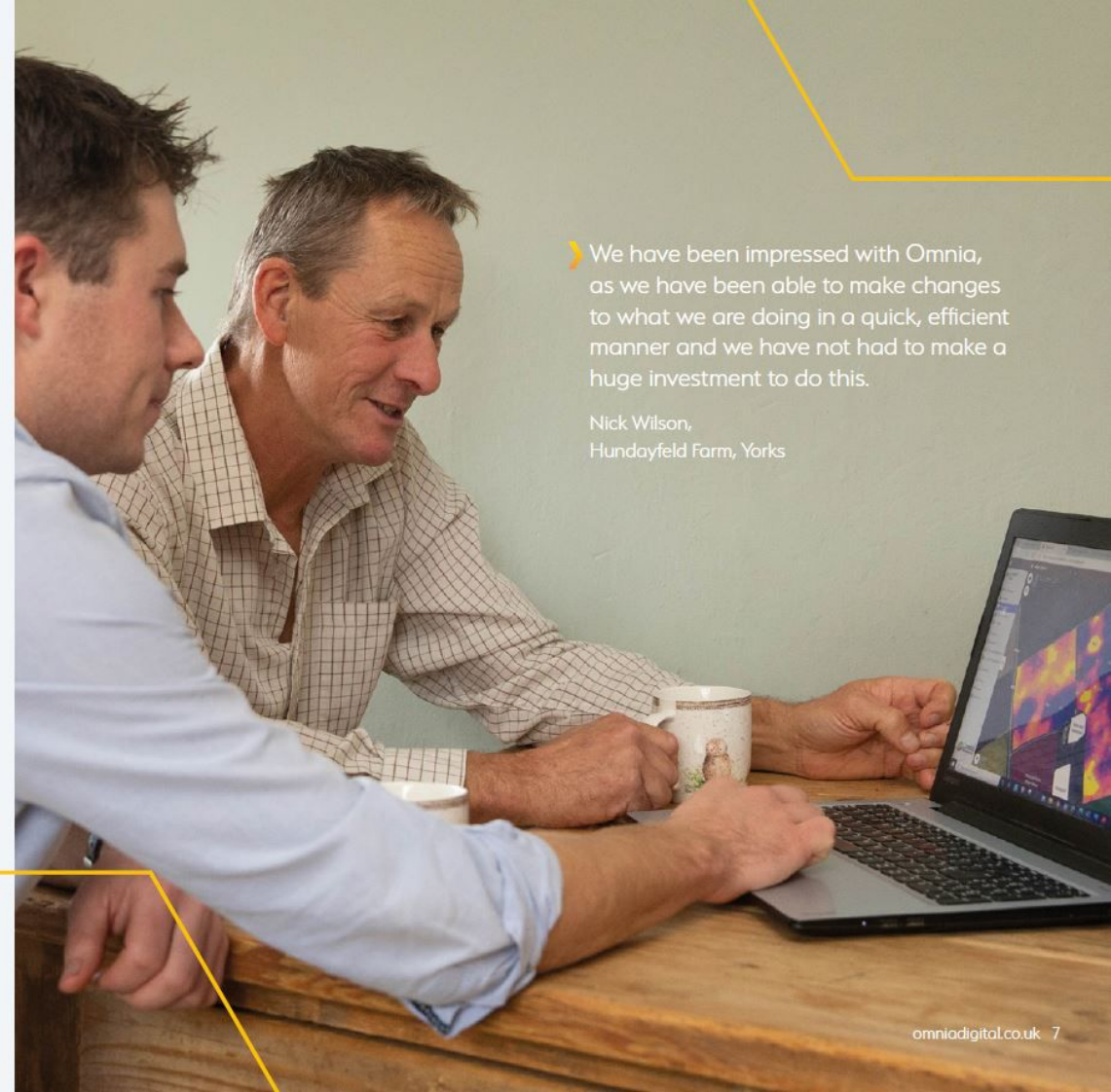


## Omnia Business Manager

### An unrivalled level of agronomic accuracy

Analysis of information from a variety of sources, allowing intelligent and informed decisions for a whole range of variable input applications at sub-field level.

- ✓ Everything in Omnia Field Manager
- ⊕ Variable rate prescription plans
- ⊕ Data exports
- ⊕ Field performance mapping
- ⊕ Cost of production mapping
- ⊕ Rotation planner



» We have been impressed with Omnia, as we have been able to make changes to what we are doing in a quick, efficient manner and we have not had to make a huge investment to do this.

Nick Wilson,  
Hundayfield Farm, Yorks



**Capture your thoughts and knowledge in one place**

- › Weed and slug pressure
- › Drainage
- › Pictures
- › Environmental features
- › Trial areas
- › Drone imagery
- › Tracks and field access points
- › Buffer zones
- › Irrigation equipment
- › Special points of interest

8





Omnia Access

## Connectivity

Omnia utilises data regardless of the machinery brand you operate. Omnia supports all common format standards from across the industry to ensure data transfer is quick and easy.

- › Import/Export common file formats
- › Seamless links with third party apps
- › Wireless data transfer
- › Smartphone/Tablet applications
- › Omnia has made it super easy for us to import and export data with multiple platforms and brands. We are yet to find something Omnia doesn't work with.

Roy Fisher,  
Airdrie Farming, Fife

Some features not available with Omnia Access

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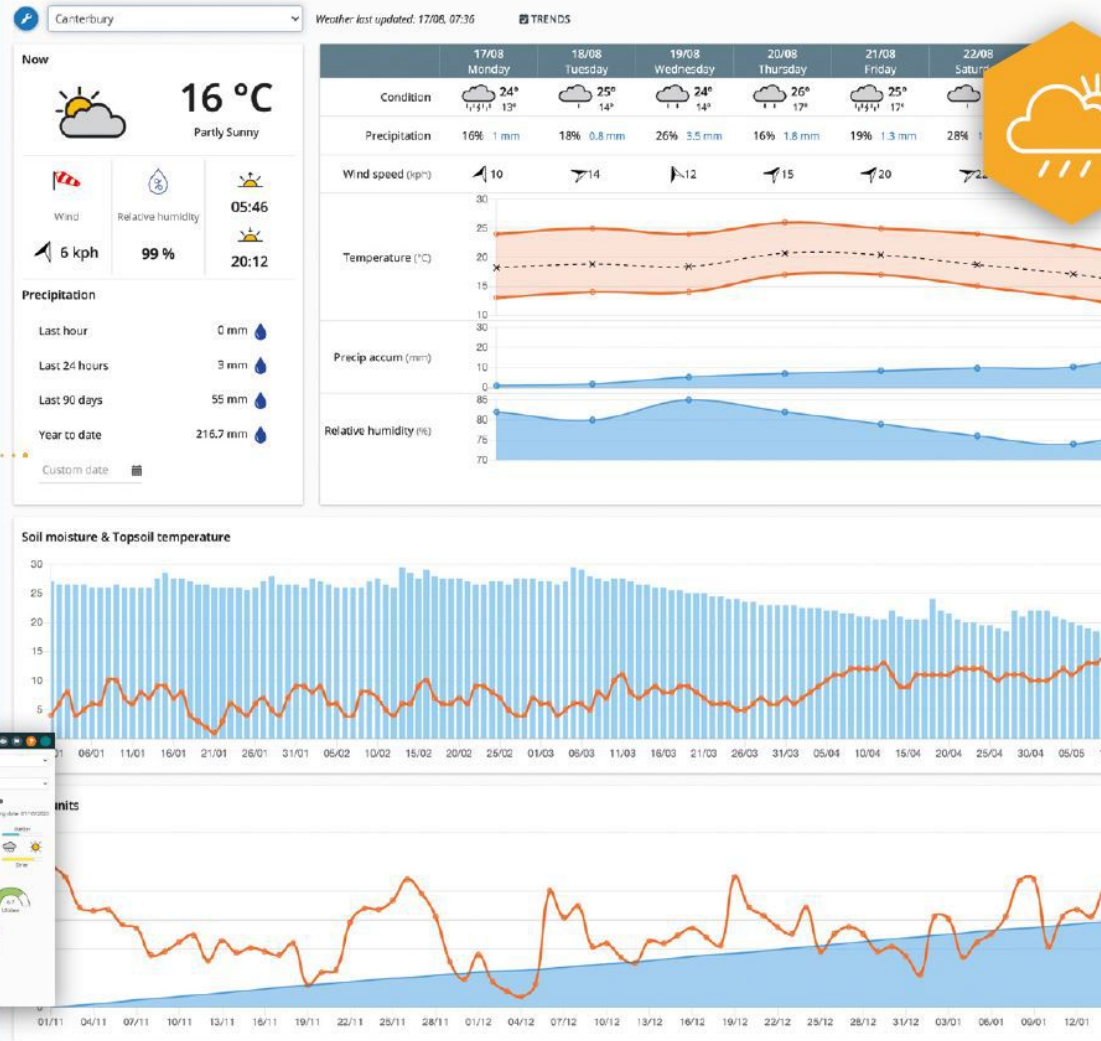
Omnia Access

## Climate Insight

Specific to your situation

- Long term weather trends
- Historic weather data
- Soil temperature and moisture charts
- Crop growth stage modelling
- Pest and disease forecasting – optional email alerts
- Wind speed and solar hours

Some features not available with Omnia Access

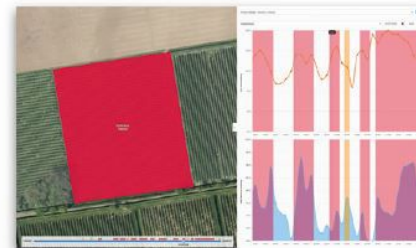


## An innovative solution

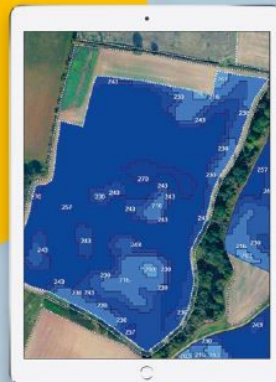
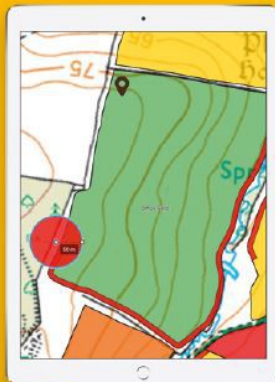
Get weather forecasts accurate to 1km<sup>2</sup> of a virtual weather station for a 10 day period.

Several stations can be placed on the holding, and fields can be associated with individual stations.

You can also view historic data which makes record keeping and treatment justification much easier.



## Accurate management of manure and fertiliser



It all comes down to the same requirement; using manures to maximum benefit, saving money where fertiliser is not needed, reducing harmful impact on the environment, whilst complying with NVZ rules.

Michael Howie,  
Morwick Dairy, Northumberland



Omnia Field Manager

## Nutrient & Manure Management

Meeting Rules for Water and easing burden of NVZ regulations

### Maximising Nutrient Use Efficiency

Omnia delivers unrivalled whole field nutrition planning to help manage optimum uptake.

Calculations are fully justified to meet specific farm needs, including Nitrogen breakeven ratio.

Regular soil sampling can be included for P, K, Mg and S. Other essential soil attributes can be measured including:

- › pH
- › Organic Matter
- › Cation Exchange Capacity
- › Micronutrients

### Manure Management Planning

Manure and slurry should be treated as a valuable resource of nutrients and organic matter.

An Omnia manure management plan is split into five specific sections:

1. Risk Map
2. Farm Limit
3. Field Limit
4. Storage
5. Imports and Exports

Use your manures to maximum benefit and reduce harmful impact on the environment.





Omnia Field Manager

## Field Diary

Field Diary allows you to view and log field inspections or operations that have been made throughout the season.

Data captured on the Omnia Scout app flows seamlessly into Field Diary.

- › View/Log inspections and operations
- › Confirm application of plans
- › Store and view crop pictures
- › Create reports of diary entries
- › Enhance traceability and justifications

Field diary

100 m

Opposite Cottage Winter Rye

Back Steading Winter Rye

Front Steading Dubbystyle Winter Rye

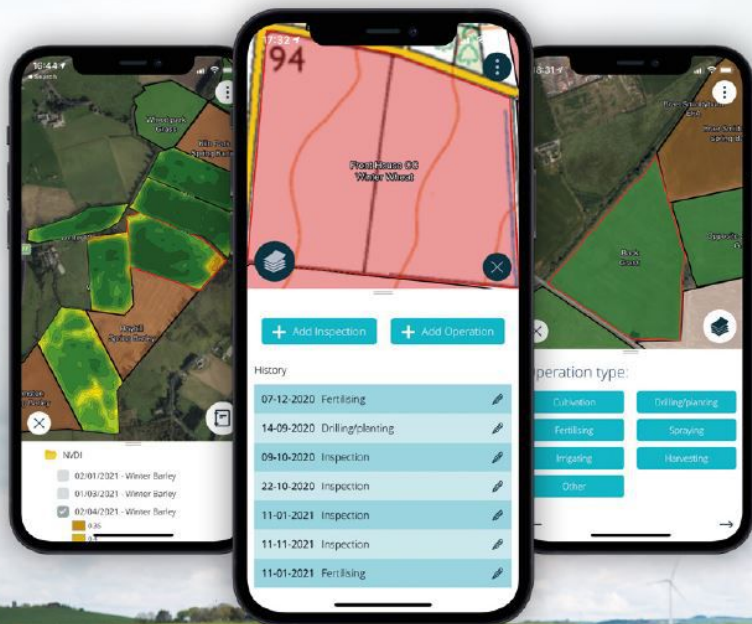
Back Cottage/Back House Winter Rye

Front Dubbystyle House Winter Rye

2021

omniaprecision.co.uk 17





› The Omnia Scout app has been really useful to get my clients to record fertiliser and manure applications quickly and easily – this helps me with crop nutrition requirements and also keeps them compliant with legislation.

Jim Clark, Agronomist, Cumbria



Omnia Field Manager

## Omnia Scout

**The Omnia Scout app allows you to view and log data whilst out in the field.**

It is intuitive to use and extends your use of Omnia, wherever you are.

The app enables you to keep up to date with what is happening in the field.

- › View/Add/Edit layers
- › Add field inspections
- › Add field operations





Omnia Field Manager

## Satellite Imagery

Whether you are looking to monitor crop development and health over the season, create variable Nitrogen plans, or scout fields; Omnia satellite imagery has you covered.

View available Sentinel 2 data and choose which images to save as layers against your crops.

- › RGB True Colour
- › NDVI
- › Chlorophyll Index



Omnia Business Manager

## Targeted Nutrition

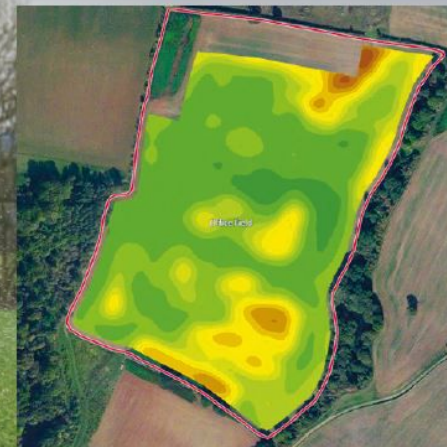
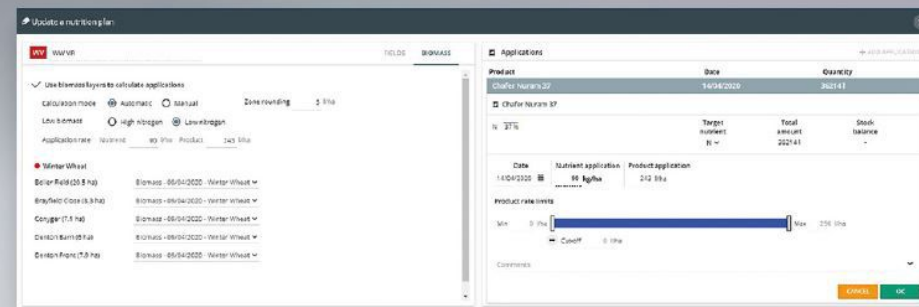
Supplying crop demand accurately and cost effectively.

Omnia offers effective solutions to managing variable fertiliser applications.

- › Optimise fertiliser use for yield and quality
- › Increase applications to low or high biomass areas
- › Vary liquid or solid fertiliser applications
- › Use satellite imagery data
- › Compliance with Rules for Water
- › Nmax calculation

› We used to blanket treat everything, but now fertiliser is only applied where it's needed.

Daniel White,  
Bottisham, Combs



## Target nutrients where they are needed most

Compare historic and recent analysis to determine the actual crop demand accurately and cost-effectively.

Soil sampling results can also be uploaded into the software.





Omnia Business Manager

## Targeted Seed Rates

Variation in crop establishment within a field can be considerable.

Using the crop type, variety and anticipated drilling date Omnia suggests a target plant population, which you can modify to meet your individual situation.

Maps of soil types and additional factors such as seedbed condition, weed or slug pressure, can then be overlaid.

A seed rate map that matches the agronomic requirement of the field more closely than ever before.

Without a uniform plant stand you are always playing 'catch up' and have already lost potential.

Chris Wade,  
Graham Wade Farms, Lincs



Increase yields  
by 0.6t/ha  
Reduce blackgrass  
tillering by 50%



WEED PRESSURE: High  
WEED TYPE: Black grass  
MAP YEAR: 2019



SEEDBED CONDITION: Good  
GERMINATION RATE: 85%  
TGW: 52



SLUG PRESSURE: High  
CROP TYPE: Winter Wheat  
PREVIOUS CROP: OSR



SOIL TYPE: Sandy Clay Loam  
DATE: 20 October  
TARGET PLANTS: 320







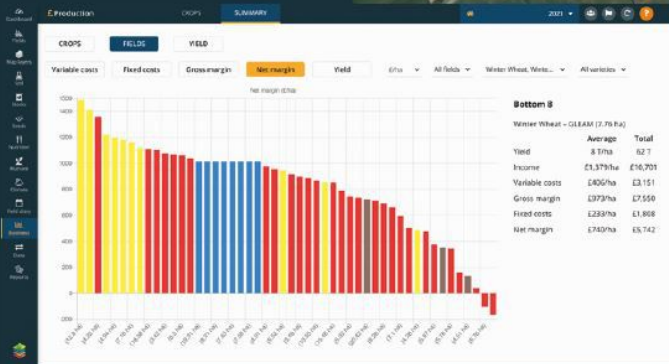
Omnia Business Manager

## Financial Performance

### Providing the tools to assess in field profitability

Explore the financial performance of a field, taking account of variable application of inputs and yield maps, to give a greater level of understanding than ever before.

The business planning tools allow you to focus on the areas where you can make the biggest difference, assess alternative cropping and mitigate risk.







### Soil Samples Taken and Data Processed

Data is collected by scanning and taking reference soil samples.

The raw scan, soil data and soil samples are combined and processed to produce high-definition soil property layers.



### Measures Four Naturally Emitted Isotopes

The TerraMap system uses passive gamma-ray detection technology to map all common nutrient and physical soil properties.

The scanner, which is manufactured by SoilOptix, measures Caesium, Uranium, Potassium and Thorium.



### 800 Reference Points Per Hectare

TerraMap produces the highest resolution soil mapping layers at over 800 data reference points per hectare.

In comparison, grid sampling map layers have only a single data point per hectare.

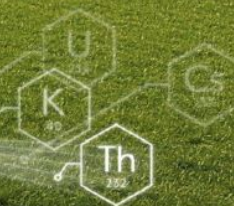
› TerraMap offers a big jump in accuracy.

Charles Parkinson,  
Manor Farm, Lincs

## TerraMap

**TerraMap is a soil service that enables better informed decisions for crop management and soil stewardship**

- › Measures and maps common nutrient properties
- › Defines soil textural changes within the field
- › Provides more data points, greater definition and more detailed soil maps than any other system in the world
- › Use data to produce variable rate application for seed and crop nutrition
- › Tailored to the specific soil conditions with unprecedented accuracy
- › The TerraMap Gold service measures soil's 'plant available' and 'non-readily available' nutrients, allowing greater understanding of soil dynamics



### Standard Properties



### Soil Texture



### Other Properties



### Additional Elements





# Hardware Solutions

## iPad Variable Rate Solutions – Streamline your precision farming operations.

Connect and E-Seed are low cost solutions that have been designed to simplify precision farming. The iPad apps allow you to seamlessly and instantly send variable application maps created in Omnia to the field, and control the machines as well.

- › Cost effective
- › Intuitive
- › Greater control
- › Wireless data transfer
- › Improves efficiency
- › Wide range of compatibility

Visit the Omnia website for a full list of compatible machines.

## › iPad Variable Rate Solutions

Streamline your precision farming operations



## Omnia Connect

Easily connect your drill, spreader, or sprayer to an iPad for variable rate applications. A low cost solution to enable variable rates where you do not have GPS rate control technologies.



## Omnia E-Seed

Upgrade any mechanical drive drill with the E-Seed conversion kit. Variable rate drilling is now possible with the land wheel replacement electric drill module.






For more information about any  
of our Omnia services contact:

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E: [info@omniadigital.co.uk](mailto:info@omniadigital.co.uk)



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