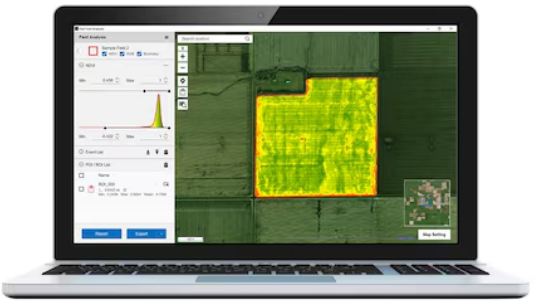
SONY

FFA-PCW

Fast Field Analyzer (Software licenses can be purchased from Sony's online store. Camera & Sensor Unit can be purchased from our Resellers)



Overview

In-depth, yet easy-to-use software that streamlines and enhances drone field surveys.

Fast Field Analyser Version 2.0 is the software of choice for growers and agronomists who want to analyze large agriculture fields rapidly and with precision.

The complete offline system simultaneously processes NDVI and RGB data, plus geolocation information—captured by our drone-mounted Multispectral Camera and GNSS Sensor Unit—to produce highly detailed maps and enable rapid in-field analytics with no Internet connection necessary.

The ability to process multiple sets of data at the same time, with heads-up quality checking, maximises your potential coverage, and ensures you get the most out of each drone flight. Automatic calibration means you're always ready to fly, while fast image stitching dramatically increases the speed and range of scouting. Users can capture detailed maps with just 20% image overlap, compared to 80% for conventional stitching.

With newly added stand count feature in Fast Field Analyzer Version 2.0, the system supports full season use case – from stand count, nitrogen application, weed and desease evaluation to yield estimation – with just one system.

A range of data-driven reports allow agronomists to collaborate with stakeholders and provide best-practice advice in a way that resonates with growers, strengthening their role as trusted advisor.

Users can quickly identify areas where the crop is damaged due to pest or weed pressure, and mark regions or points of interest for further inspection. This streamlines the scouting process and facilitates efficient prioritisation of resources to optimise yield.

Features

Wide area stand count enables sectional replanting
Automatic stand counting allows fast, accurate evaluation of the entire field to enable sectional replanting operations as a result of our original AI-based technology. The system provides an entire replant decision-making support workflow including automatic stand count, calculating establishment rate against variable rate, support zoning replanting section and cost estimation of replanting. Wide-area in-field counting analytics is carried out in minutes, supporting timely decision-making during the limited time window for replant judgement.

Multiple data outputs
The software generates NDVI and RGB maps, geolocation information (GPX/KML/JSON), high resolution RGB images and PDF reports to ensure you never miss a thing. This comprehensive set of resources allows users to examine a variety of vegetation indices, enabling enhanced agricultural planning.

Multiple flight processing
When more than one battery is required to cover an area, Fast Field Analyzer will seamlessly generate a single map from several flights. There's no need to start over, and no duplicate data.

Fast image stitching
Using the precise geotagged image data captured by the Multispectral Camera and GNSS Sensor Unit, Fast Field Analyzer stitches images together to generate NDVI and RGB data in a single map within minutes to support in-field decision making.

Rapid quality check
You can quickly validate data before processing to save time deciding if another flight is necessary. Flight path shows individual image boundaries, enabling users to eliminate unnecessary shots before initiating image stitching.

Operational offline
The solution can generate a map field-side, within minutes of the drone landing, without an internet connection. There's no need for time-consuming uploading and processing on the cloud. Users can trigger offline processing and analysis and review what action is required within minutes.

Easy-to-use Farm Analysis Tool
After generating the NDVI/RGB map, you can analyze the field using a variety of analytics tools, such as flexible color map adjustment and quick statistical analysis with visual graphs. You can also produce field analysis reports to share with stakeholders to get their input.

Targeted ground truthing
Users can assign specific sites as 'region of interest' or 'point of interest'. This enables growers and agronomists to visit an exact location using any GPS device, such as a smartphone with Google Maps. The data will be cached in Google Maps to aid in finding the location, with no loss of situational awareness.

Data management structure
Field data can be managed in a way that's familiar to most agronomists and growers. Organizing data by Farm/Field/Date and 'field-by-field' rather than 'flight-by-flight' allows users to track progress over time, and easily find the information they need.

Third-party compatibility
Fast Field Analyzer works seamlessly with other software. Data can be imported to third-party farm management software or processed with 3D orthomosaic software, broadening the tools available to growers and agronomists who require compatibility with other programs.

After-sales support
US-based contact center support is available to assist with any customer queries, so help is always at hand.

Specifications

General	
Operating System	Windows 10 Pro 64-bit (English)
CPU	Intel Core i7 quad core or higher
Memory	16GB or more
Storage	SSD 512GB or more
Display	FHD (1920 x 1080) or higher
PC software for Sony's Smart Agriculture Solution	

Related products

MSZ-2100G

Multispectral Camera and GNSS Sensor Unit (Camera & Sensor Unit can be purchased from our Resellers. Software licenses can be purchased from Sony)

Gallery