

Parrot® DISCO-PRO AG

ALL-IN-ONE DRONE SOLUTION
FOR PRECISION AGRICULTURE

Powered by



80ha COVERAGE
AT 120M* FLIGHT
ALTITUDE (200AC @ 400FT)

PARROT SEQUOIA
RGB & MULTISPECTRAL
SENSOR

INCLUDES
ONE YEAR SUBSCRIPTION
TO CLOUD SERVICE

MULTI-PURPOSE TOOL
PHOTO 14MPX
VIDEO 1080P FULL HD

AIRINOVFIRST+

ANALYZE & DECIDE
NDVI MAPS VIA
CLOUD SERVICE

SAFE
EASY TO PILOT
RETURN HOME

NDVI & SMART ZONING MAPS



OVERVIEW

Parrot Disco-Pro Ag is the multi-purpose all-in-one precision agriculture solution for farmers that fits in their everyday tool box to help them improve ROI of their large crops.

This end to end multi-purpose solution allows farmers to have easily and quickly insights on their crops whenever they need to:

- Identify crop health, relative crop maturity and areas damaged thanks to the AIRINOV report based on NDVI maps
- Perform a quick overview of the crop and the farming infrastructures with the Parrot Disco-Pro front Full HD stabilized camera

Thanks to the automated flight of the Parrot Disco-Pro, the Parrot Sequoia multi-spectral sensor captures invisible data of your crop from the sky. Once processed in the easy to use and powerful agriculture mapping cloud platform AIRINOV First +, the AIRINOV report is generated presenting NDVI maps that gives actionable insights on the health of the crop.

FLY

No need to be a professional pilot: Fly safe and easily the Parrot Disco-Pro with the Pix4Dcapture navigation app whenever you need to, the Parrot Disco-Pro will automatically fly over the selected area and return to home to land when the fly is finished

CAPTURE

Automatic capture of visible and invisible crop data from the sky thanks to the advanced Parrot Sequoia multi-spectral sensor

PROCESS

Process your crop data with the powerful and easy to use agriculture mapping cloud solution AIRINOV First +. Analyze your crop health thanks to the actionable AIRINOV report with NDVI maps





Crop Scouting

Full HD Video camera
Photo 14Mpx

Crop Mapping

Parrot Sequoia Multispectral sensor



THE MULTI-PURPOSE TOOL FOR THE FARMER

Visual Scouting

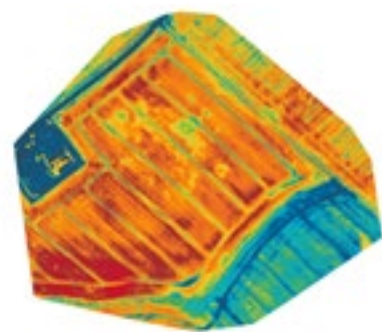


Front Camera for visual inspection of crops, farm infrastructure and livestock

Camera modes:

- Video: Full HD 1080p
- Photo: 14Mpx

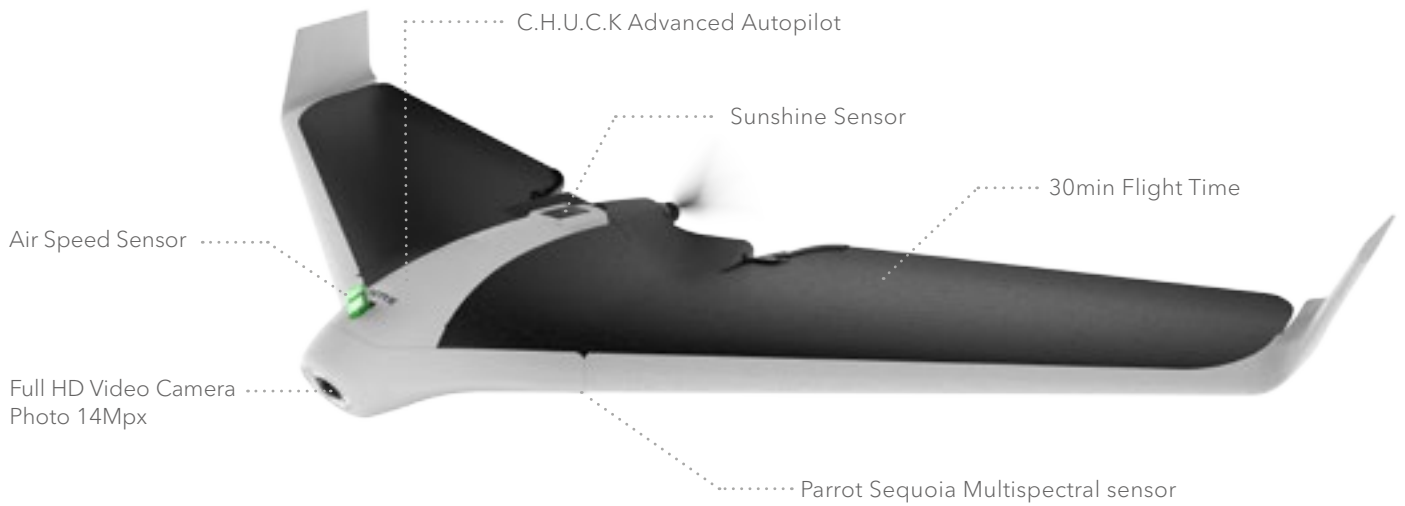
Crop Mapping



Parrot Sequoia for crop mapping from the sky and creation of NDVI maps

Features:

- 4 sensors to capture different wavelengths
- RGB camera for visible color mapping



FLY

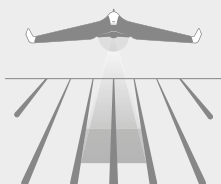
Parrot Disco-Pro is based on the consumer-proven flying wing Parrot Disco: reliable, safe and easy to pilot thanks to its advanced autopilot



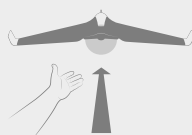
Pix4Dcapture is the easy to use flight planning mobile app that creates automatic and optimal flight plans to map a defined area.



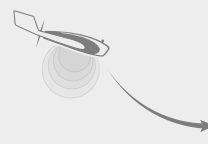
AREA COVERAGE:
80HA (200AC) PER BATTERY
AT 120M FLIGHT ALTITUDE (400FT)



**HAND LAUNCH
TAKE OFF**



**AUTOMATIC
& SAFE LANDING**



RANGE:
UP TO 2KM / 1.24 MILES*



*with Parrot Skycontroller 2 in an interference free and unobstructed environment



Loiter point after take-off

Switch to front camera video streaming

Surface orientation modification

Flight Altitude selection

Surface size modification

Landing point selection and approach path

PIX4D CAPTURE

Download on the App Store

GET IT ON Google Play

When clicking start a check list will appear, if all the elements are green a countdown will start for take-off

Pix4Dcapture is the easy-to-use flight planning mobile app that creates automatic and optimized flight plans to map a defined area from your mobile device.

- Easily define flight missions to map areas at the tip of your fingers
- Customize mapping parameters like flight altitude according to your needs

OPTIMAL FLIGHT PATH

The optimal flight path is automatically computed by the mobile app to map the defined area.

OPTIMAL DATA CAPTURE

The solution will manage the photo capture from Parrot Sequoia to ensure a proper mapping.

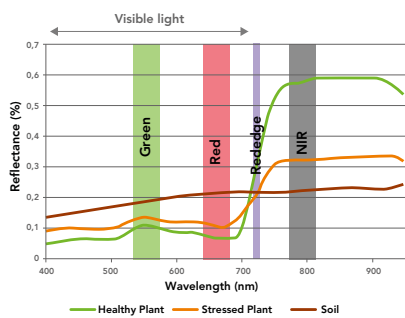


CAPTURE

PARROT SEQUOIA CAPTURE THE INVISIBLE

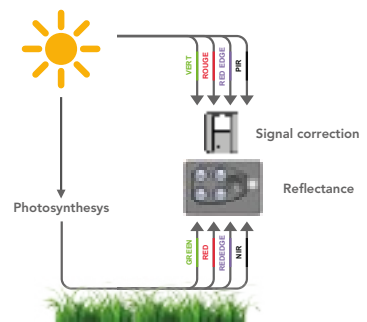
The Parrot Sequoia multispectral sensor captures automatically both visible and invisible images, providing advanced data to optimally monitor the health and vigor of your crops. In addition to the visible images, Parrot Sequoia captures wavelength, Green, Red, Red-Edge and Near Infrared to highlight the health of plants.

Green Vegetation Reflectance



The health of plants can be identified according to how they reflect light in the different wavelengths

Concept



The multispectral sensor 72 g/2.5 oz

A synchronous, global shutter drone sensor with four different bands and an RGB camera for visual scouting.

Red
Wavelength 660nm
Bandwidth 40 nm
Definition: 1.2 Mpx

Green
Wavelength 550nm
Bandwidth 40 nm
Definition: 1.2 Mpx

Red edge
Wavelength 735nm
Bandwidth 10 nm
Definition: 1.2 Mpx

Near infrared
Wavelength 790nm
Bandwidth 40 nm
Definition: 1.2 Mpx

Internal storage
64 GB

Lens protector
strong and durable

RGB camera :
Definition : 16.0 Mpx

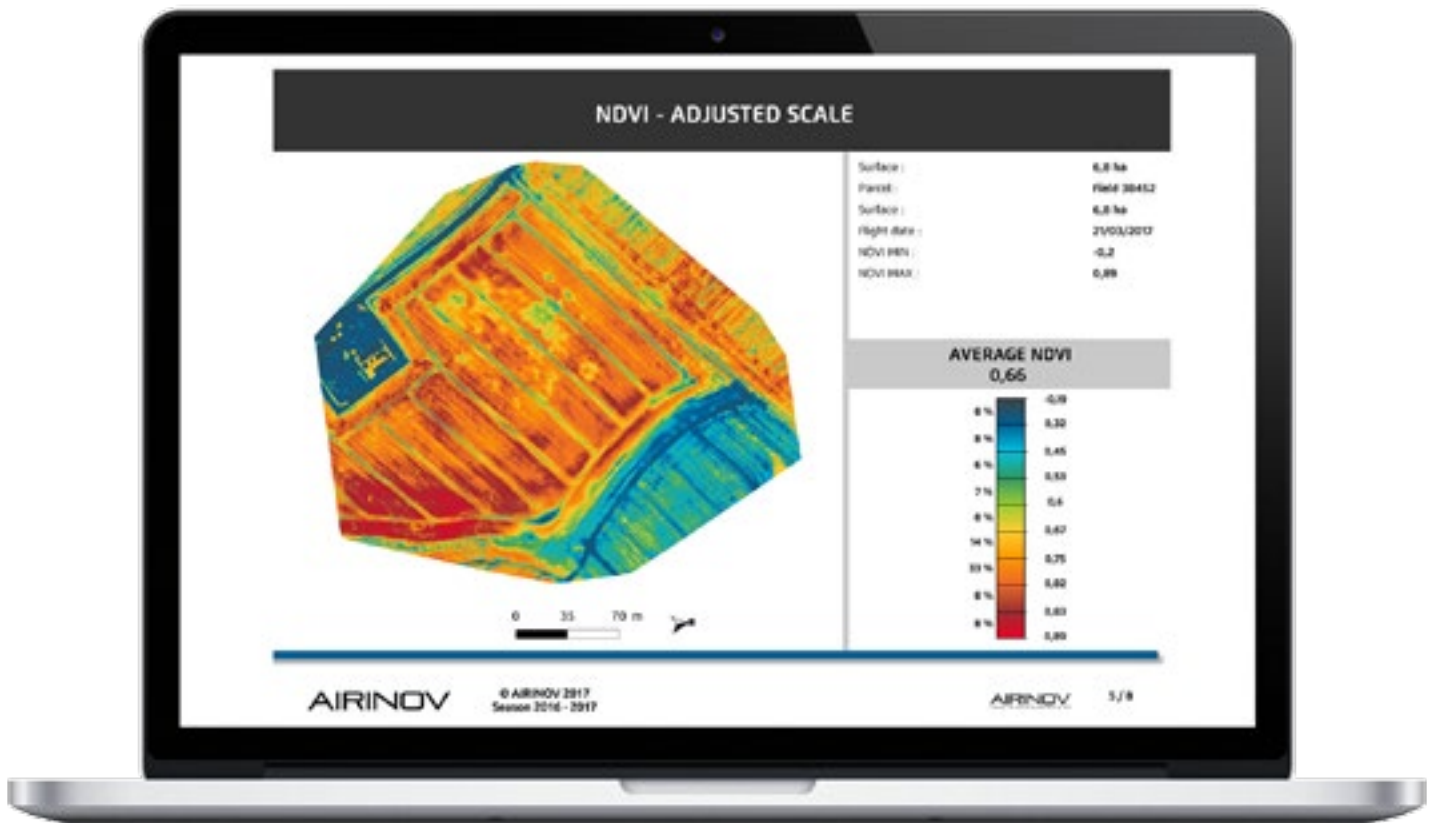
Easy and fast access
via Wi-Fi and USB

The sunshine sensor 36 g/1.3 oz

A fully-integrated sunshine sensor captures and logs the current lighting conditions

GPS & IMU
Precise geo-tagging technology

Additional storage
thanks to SD card slot



AIRINOVFIRST+

PROCESS

AIRINOV First+ is the powerful and easy to use agriculture mapping cloud solution dedicated to Parrot Disco-Pro AG.

AIRINOV First+ automatically processes the crop data captured by the Parrot Sequoia sensor and generates an actionable report.

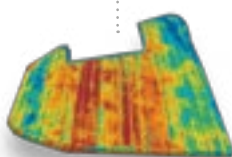
The AIRINOV report can be analyzed to identify intra-field variability:

- Crop health
- Relative crop maturity
- Problem areas in a crop field

Key features:

- 1 year subscription to the AIRINOV First+ cloud service
- Easy to use and quick generation of the AIRINOV report sent directly to your email address
- Up to 150ha (370ac) per week

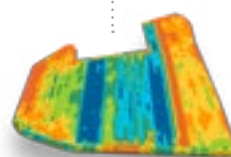
NDVI map, the easiest way to measure intra-field variability



Simple zoning map for quick analysis



Detailed zoning map to help do Variable Rate Application



Get insights with the AIRINOV report in 3 simple steps

Create your account on Parrot.airinov.com



Upload the crop data on the AIRINOV First+ cloud platform



Get your AIRINOV report directly on your email account and analyze your crop

TECHNICAL SPECIFICATIONS

PARROT DISCO-PRO

OPERATION OVERVIEW

- Area Coverage: 80ha (200ac) in a single flight at 120m flight altitude (400ft)
- Ground resolution: 14.8cm/px (5.5in/px) at 120m (400ft) flight altitude
- Automatic flight plan powered by Pix4Dcapture app
- Hand launch for take-off
- Automatic landing

GENERAL

- Weight : 780 g without Parrot Sequoia
- Take-off weight : 940 g with Parrot Sequoia & mounts
- Size : 1150x580x120mm (45x22x5in)
- Wingspan : 1150 mm (45 in)
- Removable wings for transport

PHOTO & VIDEO

- Photo: 14Mpx wide angle camera
- Video: 1080p Full HD
- Video streaming : 480p / 720p
- Internal Memory: 32GB

WI-FI AND TRANSMISSIONS

- Range: Up to 2km with Parrot Skycontroller 2, in an unobstructed area free of interferences
- WiFi AC-type, 2 bi-band antennas (2,4 and 5GHz)

REMOVABLE BATTERY

- Battery life : 30min with Parrot Sequoia
- 2700 mAh / 25A 3 cells Lipo Battery

SENSORS

- Airspeed sensor (Pitot tube)
- Built-in GPS + GLONASS
- Inertial Navigation System
- Altimeter
- Ultrasound
- Optical flow camera

PARROT SEQUOIA

RGB CAMERA :

- Resolution: 16 Mpx, 4608x3456 pixels
- HFOV: 63.9°
- VFOV: 50.1°
- DFOV: 73.5°

4 GLOBAL SHUTTER SINGLE-BAND CAMERAS :

- Resolution: 1.2 Mpx, 1280x960 pixels
- HFOV: 61.9°
- VFOV: 48.5°
- DFOV: 73.7°

4 SEPARATE BANDS :

- Green (550nm BP 40nm)
- Red (660nm BP 40nm)
- Red Edge (735nm BP 10nm)
- Near infrared (790nm BP 40nm)

GENERAL CHARACTERISTICS :

- Dimensions: 59x41x 28mm (2.3x1.6x1.1in)
- Weight: 72 g (2.5 oz)
- Photo mode: Up to 1 fps
- Internal storage: 64 GB built-in storage
- Inertial measurement unit & magnetometer
- Power: 5 W (~12 W peak)

SUNSHINE SENSOR (INCL. IN PARROT SEQUOIA) :

- Dimensions: 47x39.6x18.5mm (1.8x1.5x0.7in)
- Weight: 35 g (1.2 oz)
- 4 spectral sensors (same filters as body)
- GPS
- Inertial measurement unit & magnetometer
- SD Card slot
- Power: 1 W

IN THE KIT : 1 Parrot DISCO-PRO, 1 Parrot Sequoia (Sunshine & Multispectral sensors), 1 Parrot Skycontroller 2, 3 Batteries, 1 Backpack, 1 Year subscription to AIRINOV First+