

# 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

**AIRINOV**FIRST+

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

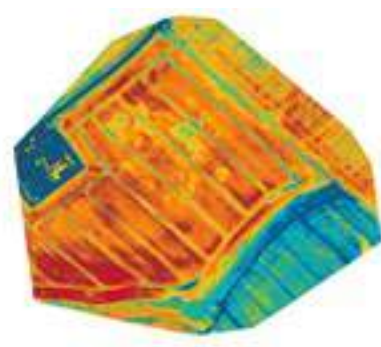


Front Camera for visual inspection of crops, farm infrastructure and livestock

**Camera modes:**

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

## Crop Mapping

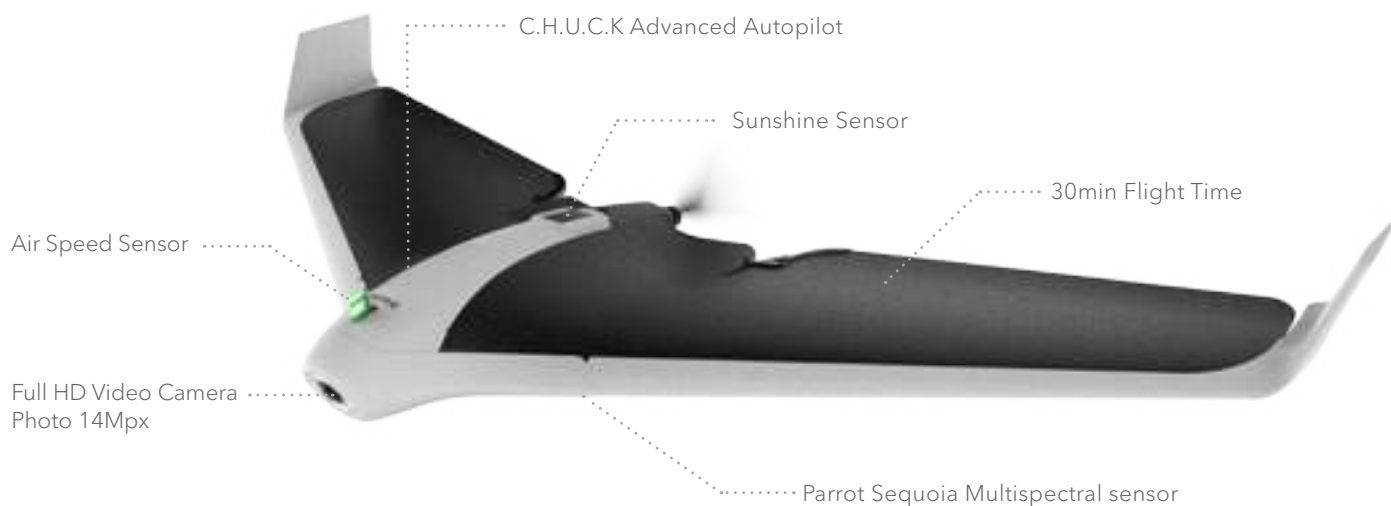


Parrot Sequoia for crop mapping from the sky and creation of NDVI maps

**Features:**

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





# FLY

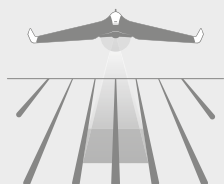
Parrot Disco-Pro is based on the consumer-proven flying wing Parrot Disco: reliable, safe and easy to pilot thanks to its advanced autopilot



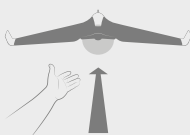
Pix4Dcapture is the easy to use flight planning mobile app that creates automatic and optimal flight plans to map a defined area.



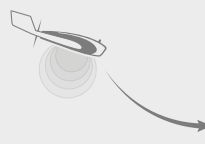
**AREA COVERAGE:**  
80HA (200AC) PER BATTERY  
AT 120M FLIGHT ALTITUDE (400FT)



**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

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

Download on the App Store

GET IT ON Google Play

**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.

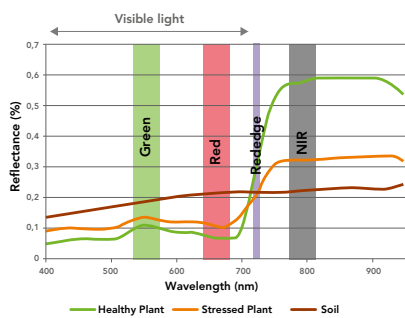


# CAPTURE

## PARROT SEQUOIA CAPTURE THE INVISIBLE

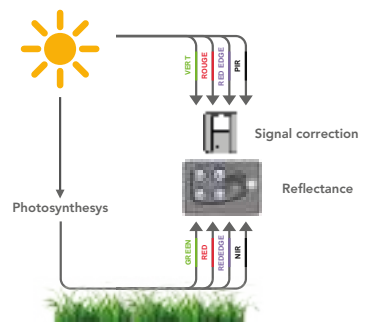
The Parrot Sequoia multispectral sensor captures automatically both visible and invisible images, providing advanced data to optimally monitor the health and vigor of your crops. In addition to the visible images, Parrot Sequoia captures wavelength, Green, Red, Red-Edge and Near Infrared to highlight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



**AIRINOV**FIRST+

## 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.

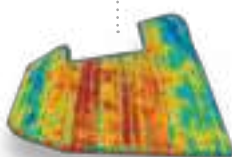
The AIRINOV report can be analyzed to identify intra-field variability:

- 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

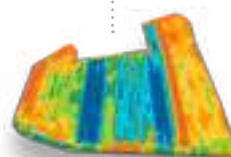
NDVI map, the easiest way to measure intra-field variability



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](http://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+