



El Secretariado de Infraestructura para la Investigación (SIPI)

INFORMA

Plataforma aérea no tripulada (tipo quadrotor) y sensores RGB y multispectral integrados en dicha plataforma.

El Departamento de Ingeniería Forestal de la UCO ha incorporado nuevo equipamiento, con cargo al EQC2018-004645-P concedido por el Ministerio de Ciencia, Innovación y Universidades a través de las Ayudas para la Adquisición de Equipamiento Científico-Técnico correspondientes al Subprograma Estatal de Infraestructuras de Investigación y Equipamiento Científico-Técnico (Plan Estatal I+D+i 2017-2020) (convocatoria 2018), cofinanciado por la Agencia Estatal de Investigación (AEI) y el Fondo Europeo de Desarrollo Regional (FEDER), cuyo Responsable Científico es el investigador José Luis Quero Pérez.

El equipamiento incorporado incluye: Parrot Bluegrass Fields, Incluye: Dron Parrot Bluegrass. Sensor multispectral Parrot Sequoia. Baterías en total (tiempo de vuelo de 3 x 25 minutos). Cargador de batería. Mochila. Parrot Skycontroller. Cargador de mando. Palas de hélices adicionales. Cable USB-A. Software Pix4Dfields (ordenador y cloud).

Cuadricóptero con cámaras integradas para mapeo y prospección aérea, cubriendo áreas de 65 hectáreas a 122 de altitud. Despegue y aterrizaje vertical Estructura de fibra de carbono y baterías para misiones de 25 minutos.

Sensor multispectral 4 bandas 1,2 Megapíxeles. Green, Red, Red Edge y Near Infrared.

Sensor RGB frontal de 14 Megapíxeles para fotos y vídeo (1080p)







EFFICIENT, RUGGED & EASY-TO-FLY
Proven quadcopter

- Fully integrated quadcopter designed for both crop mapping and aerial scouting
- Fly high to cover large fields, up to 65 ha (160 ac) @ 122 m (400 ft)
- Vertical take-off and landing ensures efficient operations, even in confined areas
- Three included batteries enable longer missions of 3 x 25 minutes (max range @ 90 ft)
- Rugged carbon-fiber structure suits the most demanding operations
- Intuitive Parrot Skycontroller 2 controller suits every pilot's needs

VISUAL SCOUTING AND CROP MAPPING
Two integrated multi-purpose sensors

- Industry-leading multispectral Parrot Sequoia sensor
 - 4 multispectral mono-bands, 1.2 MP, global shutter
 - Green (550nm ± 40nm)
 - Red (660nm ± 40nm)
 - Red Edge (730nm ± 10nm)
 - NIR infrared (780nm ± 40nm)
- Multispectral GSD up to
 - 0.9 cm/px at 10 m (0.35 in/px at 33 ft - single image)
 - 2.8 cm/px at 50 m (0.8 in/px at 100 ft)
 - 11.5 cm/px at 122 m (4.5 in/px at 400 ft)
- Front 14 MP RGB camera for fast, effective live scouting of problem areas, including the capture of both photos and full HD quality video (1080p)

ACTIONABLE IN-FIELD INSIGHTS
ParrotFields mobile app makes mapping and scouting quick & simple!

- Perform fully automatic flights or fly manually over your crops
- Generate NDVI maps in real-time during the flight
- Compare NDVI maps to monitor the evolution of your crops on your mobile device
- Explore areas of interest via unique semi-automated scouting flights
- Capture photos and videos on-demand with the Parrot Skycontroller 2
- Add value to the aerial data captured by adding text annotations and shooting photos with the app directly from the ground

IN-DEPTH CROP ANALYSIS
Full access to Pix4Fields drone mapping software for agriculture!

- Identify in-field variability faster with the new instant processing engine
- Generate predefined or custom index maps for detailed crop performance analysis
- Visualize and understand crop trends by comparing different data layers side by side
- Create comprehensive zonation and prescription maps for more precise fertilizer applications
- Import or draw field boundaries and annotate the crop "focus areas" for a more in-depth inspection
- Export prescription maps to your tractor or FMS for seamless integration into existing agriculture workflows

PACK CONTENT

- 1 Bluegrass drone (carbon fiber structure)
- 1 Parrot Sequoia - integrated in drone (4-band multispectral sensor, 1.2 MP)
- 3 batteries in total (3 x 25 minutes flight time)
- 1 Parrot Skycontroller 2 (up to 2 km max. range)
- 1 Backpack
- 2 chargers and adapters
- 1 USB cable for Micro-USB
- 4 spare propellers
- One-year subscription to both ParrotFields mobile app and Pix4Fields software (desktop & cloud)

