Parrot Sequoia

The Parrot Sequoia is the smallest, lightest multispectral drone sensor released to date. It captures images of crops across four highly defined, visible and non-visible spectral bands, plus RGB imagery, in just one flight.

Sequoia is immediately compatible with the eBee SQ agricultural drone and the eBee/eBee Ag via senseFly’s proprietary Integration Kit (see overleaf).

Key features

- Four 1.2 MP sensors (near-infrared, red-edge, red and green) + one 16 MP RGB sensor = multispectral + RGB imagery from just one flight
- Upward-facing Sunshine Sensor
  For accurate imagery, whatever the light conditions
- Customised data capture
  Choose full or half resolution multispectral imagery
  Capture multispectral data, RGB or both
- Seamless integration
  Full eMotion Ag support when planning flight
  Compatible with eBee SQ out of the box
  Easy to install Integration Kit for eBee/eBee Ag (see overleaf)

Technical specifications

Visible light

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Healthy plant</th>
<th>Stressed plant</th>
<th>Soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>0.7</td>
<td>0.6</td>
<td>0.2</td>
</tr>
<tr>
<td>500</td>
<td>0.6</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>600</td>
<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>700</td>
<td>0.4</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>800</td>
<td>0.3</td>
<td>0.2</td>
<td>0.6</td>
</tr>
<tr>
<td>900</td>
<td>0.2</td>
<td>0.1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Green vegetation reflectance

<table>
<thead>
<tr>
<th>Reflectance (%)</th>
<th>Wavelength (nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy plant</td>
<td>Green</td>
</tr>
<tr>
<td>Stressed plant</td>
<td>Red</td>
</tr>
<tr>
<td>Soil</td>
<td>Red-edge</td>
</tr>
<tr>
<td></td>
<td>NIR</td>
</tr>
</tbody>
</table>

Sequoia in detail

Main body

- Four 1.2 MP spectral cameras
- Up to 1 fps
- One 16 MP RGB camera with rolling shutter
- IMU & magnetometer
- Configuration over Wi-Fi
- 64 GB built-in storage
- 5 W (~12 W peak)
- 72 g (2.5 oz)

Sunshine Sensor

- 4 spectral sensors with same filters as body
- GPS
- IMU & magnetometer
- SD card
- 1 W
- 35 g (1.2 oz)
eBee Integration Kit*

Sunshine sensor

Body

Sensitivity

Form factor

* Required to use Parrot Sequoia with eBee & eBee Ag drones.
Parrot is a trademark or registered trademark of Parrot SA, used under license therefrom. Sequoia and Parrot Sequoia are trademarks or registered trademarks of Parrot Drones SAS.

www.sensefly.com