MicaSense Series

RedEdge-P™

The new standard for data quality and repeatability

RedEdge-P uses purpose-built optics and industry-leading industrial image sensors coupled with narrowband, scientific-grade filters. In addition, it undergoes a rigorous factory calibration process, creating a high-quality, calibrated, rugged tool for pan-sharpened multispectral outputs you can trust.

Applications

- Plant counting
- Phenotypino
- Plant health mapping
- Fertilizer management
- Disease identification

- Species differentiation and weed detection
- Advanced crop scouting
- High-res 3D point clouds

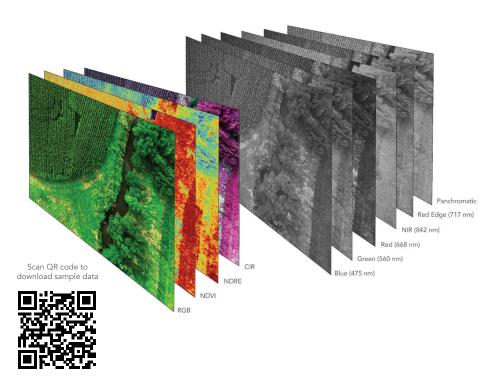
Fly Lower. Fly Faster. See More.

RedEdge-P uses the professional-grade CFexpress memory card standard, providing removable storage with customizable sizes from 64 Gigabytes to 2 terabytes, allowing constant capture of all image bands every second for over 24 hours. For jobs requiring multiple flights, there's no need to plug cables into the camera after a flight or bring your computer to the field. RedEdge-P's removable storage gets your next flight started in seconds.



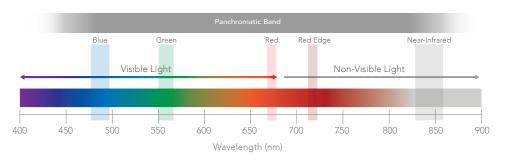
Season-long canopy analysis at a higher resolution

The RedEdge-P is the rugged, high-quality, powerful multispectral sensor you've come to trust, now with a high-resolution panchromatic band for pan-sharpened output resolutions of 2cm (at 60m) - twice the ground resolution of the industry-standard RedEdge-MX. It enables pixel-aligned outputs at previously unattainable resolutions while maintaining the efficiency and reliability of the RedEdge legacy, opening the door to season-long comprehensive plant canopy analysis at all growth stages.



The spectral resolution of the RedEdge-P Multispectral Sensor

The MicaSense RedEdge-P measures the light reflected in five different bands (red, green, blue, red edge, and near-infrared), which, coupled with a panchromatic lens, provides high-resolution RGB and multispectral outputs.



**SPECIFICATIONS

WEIGHT

350 g (12.3 oz.) RedEdge-P + DLS 2

DIMENSIONS

 $8.9 \times 7.0 \times 6.7 \text{ cm}$ (3.5in x 2.8in x 2.6in)

RGB OUTPUT*

5.1 MP (global shutter, aligned with all bands)

SENSOR RESOLUTION

1456 x 1088 (1.6MP per MS band) 2464 x 2056 (5.1MP panchromatic band)

GROUND SAMPLE DISTANCE

7.7 cm per pixel (per MS band) at 120m (\sim 400 ft) AGL

3.98 cm per pixel (panchromatic band) at 120m (~400 ft) AGL

FIELD OF VIEW

50° HFOV x 38° VFOV (MS) 44° HFOV x 38° VFOV (PAN)

EXTERNAL POWER

7.0 V - 25.2 V

POWER INPUT

5.5/7.0/10W (standby, average, peak)

IP RATING

IP4X

CAPTURE RATE

Up to three captures per second raw DNG

STORAGE

CFexpress card

INTERFACES

Three configurable GPIO: select from trigger input, PPS input, PPS output, and top of frame signals. Host virtual button. USB 2.0 port for WiFi. Serial. 10/100/1000 Ethernet. CF Express for storage

SPECTRAL BANDS

Blue (475 nm center, 32 nm bandwidth), Green (560 nm center, 27 nm bandwidth), Red (668 nm center, 14 nm bandwidth), Red Edge (717 nm center, 12 nm bandwidth), Near-IR (842 nm center, 57 nm bandwidth)

KIT CONTENTS

- RedEdge-P sensor
- Lens cover
- Calibrated reflectance panel
- DLS 2 light sensor with integrated GPS
- RedEdge-P and DLS 2 cables
- Mounting screws
- Hard carrying case
- CFexpress card reader



RedEdge-P: Season-long data capture at a faster rate

A single-camera solution for synchronized capture of calibrated high-resolution multispectral and RGB imagery, with an optimized FOV and capture rate for efficient flights.

Key Features

- High-resolution panchromatic band for pan-sharpened output resolutions of 2cm (0.8in) at 60m
- Five spectral bands for multiple vegetation indices and composites
- New professional removable storage standard in CFexpress, enabling up to three captures per second for faster flight speeds, cutting down on time required to map an area
- Electrical and mechanical interfaces compatible with existing RedEdge installations with just a connector upgrade



Visit us at ageagle.com/product/rededge-p/ to learn more. www.ageagle.com | Made in the USA

^{*}With appropriate post-processing

^{**}Note: Specifications are subject to change without notice