

MicaSense RedEdge™ Multispectral Camera



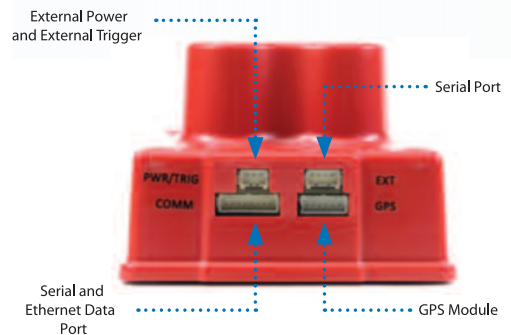
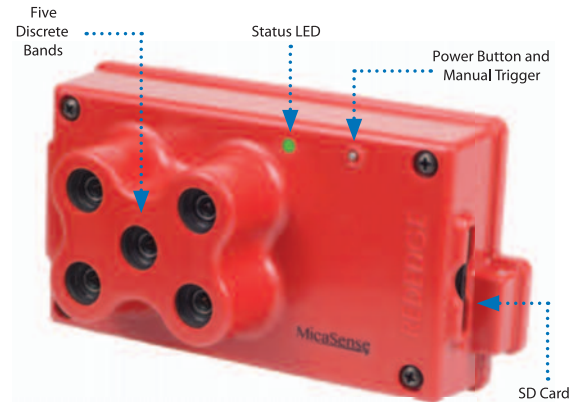
The MicaSense RedEdge™ is an advanced, lightweight, multispectral camera optimized for use in small unmanned aircraft systems. RedEdge™ provides accurate multi-band data for agricultural remote sensing applications.

RedEdge™ is much more than just a camera, sharing more design features with Earth imaging satellites than it does with standard consumer cameras. Industrial imaging sensors provide high dynamic range in varying lighting conditions while removing artifacts commonly seen in drone video and imagery. Coupled with MicaSense Data Services, RedEdge™ provides a complete imaging, processing, and analysis system ready for integration with any platform.

Need a closer look? Unplug your RedEdge™ and go handheld. An integrated shutter button lets you take close-ups of areas of interest, and with the optional GPS module, maintain geo-tagging and time-stamping of all of your multispectral images.

FEATURES

- Simultaneous capture of five discrete spectral bands
- Narrowband optical filters provide full imager resolution for each band
- Fast capture rate enables faster flight speeds and lower flight altitudes
- Global shutter design for distortion-free results on every platform
- Single SD card stores all images with geotags
- Calibrated for precise, repeatable measurements
- Rugged design with no moving parts
- Standalone operation, with optional external trigger and data from host aircraft
- Intuitive web-based interface accessed from any Wi-Fi capable device
- Option for Ethernet or serial connectivity with host aircraft for full configuration, status, and control of the camera



Functional features of the RedEdge™ Camera



RedEdge™ Camera attached to a Lepton RDASS™

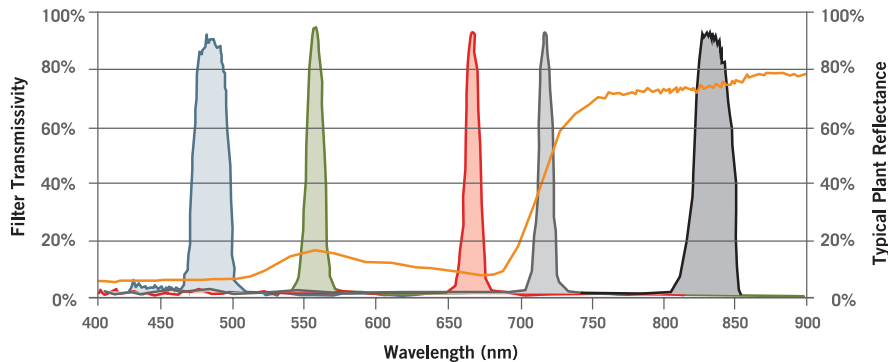
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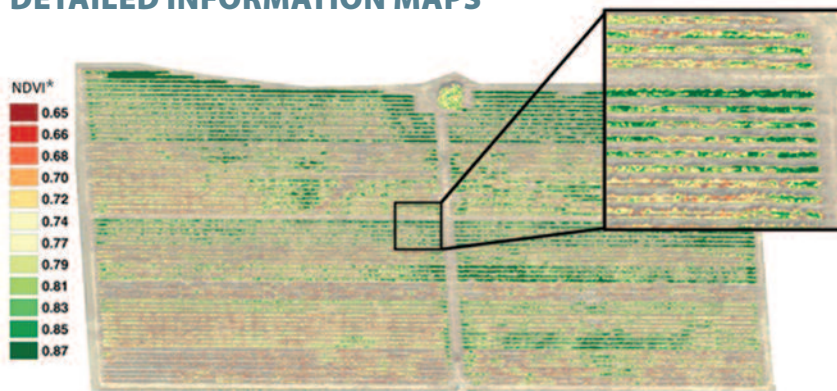
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SPECTRAL BANDS



High-grade optical filters deliver precise information specially targeted to agricultural applications.

DETAILED INFORMATION MAPS



This data map shows a vineyard from 400 feet above ground level (AGL).

Zooming in offers information on individual plant vigor

*Normalized Difference Vegetation Index

SPECIFICATIONS

Weight	150 g (5.3 oz.)
Dimensions	12.1 cm x 6.6 cm x 4.6 cm (4.8 in. x 2.6 in. x 1.8 in.)
External Power	5.0 V DC, 4 W nominal
Spectral Bands	Blue, green, red, red edge, near IR (narrowband)
Ground Sample Distance	8.0 cm/pixel (per band) at 120 m (~400 ft.) AGL
Capture Rate	1 capture per second (all bands), 12-bit RAW
Interface	Serial, Ethernet, GPS
Field of View	47.2° HFOV

DATA SERVICES

- **Secure** - your data is encrypted during upload and storage.
- **Accurate** - we do the heavy lifting to provide you reliable data. Our processing workflows include band-to-band registration and implementation of camera calibration parameters to ensure accurate results.
- **A complete solution** - your processed data is presented as ortho-rectified map layers, vegetation index layers (NDVI, GNDVI, GRVI, etc.), and analytics information maps.
- **Easy to navigate** - our intuitive user interface allows you to quickly define field boundaries, manage data layers and overlays, and securely share your data.
- **Flexible** - our data platform includes an API for access by developers and customized application integrators.

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