



## HIGH PRECISION SINGLE SENSORS



Patent Pending

The Sentera High Precision NDVI and High Precision NDRE Single Sensors utilize patent-pending technology to improve spectral band separation and generate more accurate vegetation index measurements.

Available in two variants, normalized difference vegetation index (NDVI) or normalized difference vegetation red edge (NDRE) data, the Sentera High Precision Single Sensor filters effectively reject out-of-band leakage before it can contaminate the measurement and lead to index errors.

These advanced sensors make it easier for users to integrate satellite-based index data with drone-based index data. Utilizing high precision filters, you are provided with invaluable NDVI or NDRE information about crop health, maturity, and vigor.

### FEATURES & BENEFITS

- Effectively collects only the precise bands needed for accurate NDVI and NDRE measurements
- Easily integrates into virtually any drone platform including the DJI Phantom™ 3, Phantom 4, Mavic™, & Inspire™
- Low-distortion optics + global shutter technology ensure crisp, clear crop imagery
- Helps customize application of fertilizer, pesticides and herbicides base on data-drive information
- Leverage plant health data using AgVault™ web, mobile, and desktop software

# HIGH PRECISION SINGLE SENSORS

## THE ONLY COMPLETE REAL-TIME CROP SCOUTING SOLUTION

Sentera's complete solutions enable you to collect and make use of highly precise on-field data in real time. Integrating with all major digital agriculture platforms, AgVault™ web, mobile, and desktop software allows you to easily compare, share, and analyze your NDVI and NDRE plant health data in no time. Creating actionable data has never been easier.



AgVault Mobile

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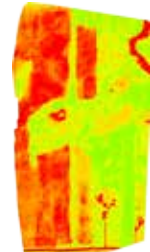
Precision Scouting Tool

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AgVault Web App

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Highly Precise, Actionable Plant Health Data

## INSTALLATION OPTIONS

The Sentera High Precision NDVI and NDRE Single Sensors can be integrated on multiple existing, in-service or new drone platforms. Some of our most popular commercial installations include the DJI Phantom™ 4, Phantom 3, Mavic™, and Inspire™ platforms.



DJI Phantom 4 Pro +  
High Precision NDVI Upgrade



DJI Mavic +  
High Precision NDRE Upgrade



DJI Inspire 1 +  
High Precision NDVI Upgrade

## SPECIFICATIONS

### Sensor

Resolution	1.2MP CMOS
Shutter	Global
Pixel size	3.75µm
Pixel count	1248 horizontal / 950 vertical

### Lens

Focal length	4.14mm
FOV	60° horizontal / 47° vertical
GSD @200' Altitude	2.2" (5.5cm)
GSD @400' Altitude	4.3" (11.0cm)

### Filter

<u>NDVI</u>	
Red Band:	625nm CWL x 100nm width
NIR Band:	850nm CWL x 40nm width
<u>Red Edge (NDRE)</u>	
Red Edge Band:	720nm x 40nm width
NIR Band:	840nm x 20nm width

**Size** 1" x 1.33" x 1.47" (25.4mm x 33.8mm x 37.3mm)

**Weight** 30 grams

**Power** 2.5W

**Voltage input range** 5V to 40V

**Frame rate** 1.2MP Stills: 7fps  
720p Video: 20-24fps

**Image format** JPEG, TIFF

**Storage** 32GB SD card per sensor  

- Image format: JPEG, 200,000 images per card
- Image format: TIFF, 8,000 images per card

**Interfaces** Ethernet, Serial/UART

**Control** Open ICD for triggering and metadata logging over serial or IP, compatible with:  

- Lockheed Martin Kestrel™ autopilot
- PIXHAWK™ autopilot
- MAVLink™-based systems
- Customized ICD options available



### Contact us—let's do something amazing!

Sentera, LLC	+1 (844) SENTERA (844.736.8372)	www.sentera.com
6636 Cedar Ave South, Ste 250	+1 (612) 204.2000 direct	info@sentera.com
Minneapolis, MN 55423		