sentera

FIELDAGENT™

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.

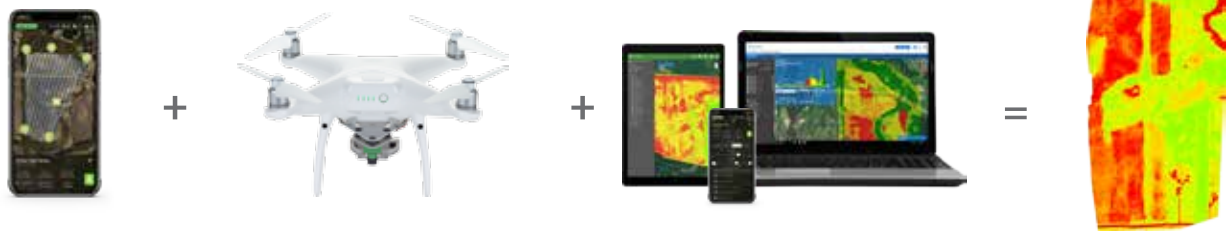
FEATURES & BENEFITS

- Effectively collects only the precise bands needed for accurate NDVI and NDRE measurements
- Easily integrates into virtually any drone platform including the DJI Phantom™ 4 and Mavic™
- 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 FieldAgent™ 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, FieldAgent™ 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.



FieldAgent Mobile | Precision Scouting Tool | FieldAgent Web, Mobile, + Desktop App | 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 and Mavic™ platforms.

DJI Phantom 4 Pro + High Precision NDVI Upgrade

DJI Mavic + High Precision NDRE Upgrade

SPECIFICATIONS

Sensor	
Resolution	1.2MP CMOS
Shutter	Global
Pixel size	3.75um
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	NDVI Red Band: 625nm CWL x 100nm width NIR Band: 850nm CWL x 40nm width Red Edge (NDRE) 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

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