



MULTISPECTRAL DOUBLE 4K SENSOR



Sentera's Multispectral Double 4K Sensor helps agronomists, crop consultants, and growers identify vegetation on the cusp of stress, supporting bias for action and helping influence crop health.

Patent Pending

The game-changing Multispectral Double 4K Sensor can capture five precise spectral light bands: blue, green, red, red edge, and near-infrared (NIR). With this innovative filtering, users can collect full-color imagery as well as vegetation indices such as normalized difference red edge (NDRE) data, at an unmatched 4K resolution.

With the Multispectral Double 4K Sensor, users will enjoy easily integrating and using the collected data with all major digital agriculture platforms.

FEATURES & BENEFITS

- Offers ability to capture five spectral bands: blue, green, red, red edge, and near-infrared
- Simultaneously collects 12MP NDRE, and high-resolution RGB data
- Capable of 4K ultra-high-definition video capture
- Compatible with several drone options
- Pairs with plug-and-play gimbal for DJI Inspire 1 drone
- Seamlessly integrates with AgVault™ web, mobile, and desktop software

MULTISPECTRAL DOUBLE 4K SENSOR

SPECIFICATIONS

Sensors	12.3MP BSI CMOS <ul style="list-style-type: none">• Sony Exmor R™ IMX377 Sensor	Data capture	12.3MP Stills 4K Ultra HD video @ 30fps 1080p/720p Video <ul style="list-style-type: none">• H.264 encoding
Spectral bands	<ul style="list-style-type: none">• Blue: 446nm x 60nm width• Green: 548nm x 45nm width• Red: 650nm x 70nm width• Red Edge: 720 nm x 40nm width• Near-Infrared (NIR): 840nm x 20nm width	Interfaces	Ethernet, Serial/UART, USB 3.0, I2C, GPIO <ul style="list-style-type: none">• Web-based camera configuration• Pushbutton control for single photo and mode select
Size	2.32" x 1.61" x 1.75" (59mm x 40.9mm x 44.5mm) <ul style="list-style-type: none">• Fits the GoPro® Hero4 footprint	Control	Open ICD for triggering and metadata logging over serial or IP, compatible with: <ul style="list-style-type: none">• Lockheed Martin Kestrel™ autopilot• PIXHAWK™ autopilot• MAVLink™-based systems• Customized ICD options available
Weight	80 grams	Storage	64GB SD card, standard and removable
Power	8W typical / 12W maximum	Data integration	Seamlessly integrates with Sentera AgVault™ Web, Mobile, and Desktop Software
Image format	JPEG, TIFF, RAW		
Field of view	60° HFOV (4K Stills / Video) 1080p ranges 30° - 60° HFOV		

INSTALLATION OPTIONS

The Multispectral Double 4K sensor can be integrated on multiple platforms including the Sentera Omni quadrotor or Phoenix fixed-wing drones.

Additionally, Sentera developed a plug-and-play gimbal that simply clicks into DJI Inspire 1, Matrice 100, 200, and 600 drones. The gimbal stabilizes the sensor, has a dedicated GPS for geo-tagging data, and can be configured to capture imagery with the users desired level of overlap. No tools or modifications are required for this integration. Users can quickly swap between the Multispectral Double 4K sensor and other gimbals, including the X3, XT, and X5.



Plug-and-Play Gimbale
Multispectral Double 4K Sensor on
DJI Inspire 1 Drone

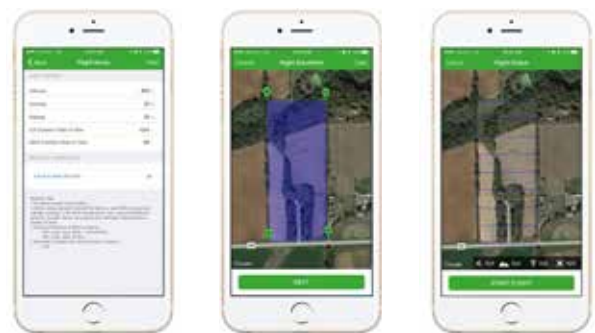


Gimbale Multispectral Double 4K Sensor
on Sentera Omni™ Drone

SENTERA AGVAULT™ WEB, MOBILE, AND DESKTOP SOFTWARE

Sentera's AgVault™ allows users to instantly capture and use high-resolution visual and NDRE data, making it easy to quickly assess crop health.

AgVault web, mobile, and desktop software works seamlessly with the Multispectral Double 4K sensor, allowing users to autonomously fly a field capturing pristine crop health data. AgVault ensures the sensor is triggered with enough overlap and sidelap to produce informative QuickTile™ maps with the option to order fully-stitched images through AgVault.



Sentera AgVault Mobile app



Contact us—let's do something amazing!

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