

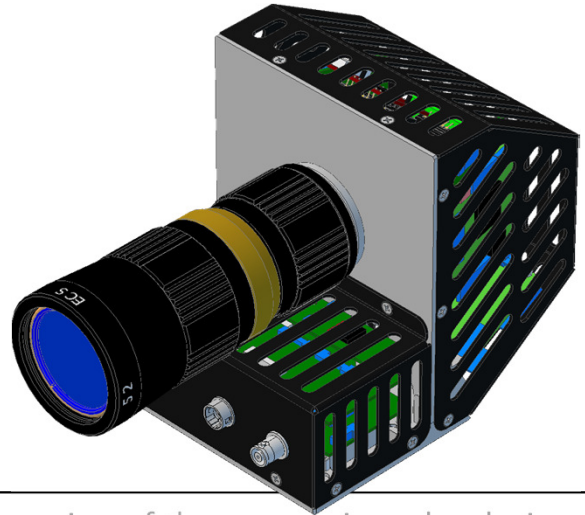
## The Condor<sup>5</sup> UAV-CMV2000

### Applications

- Precision agriculture
- Fire location
- Foliage evaluation
- Oil spill detection
- Terrain mapping

### Benefits

- With build in apochromatically corrected lenses saving space
- Light weight solution
- In house data storage and PAL output
- High resolution (2,1MB)
- Very sensitive (big pixel 5.5µm)
- Pixel to Pixel co registration of five images
- Easy stitching & fast processing of images

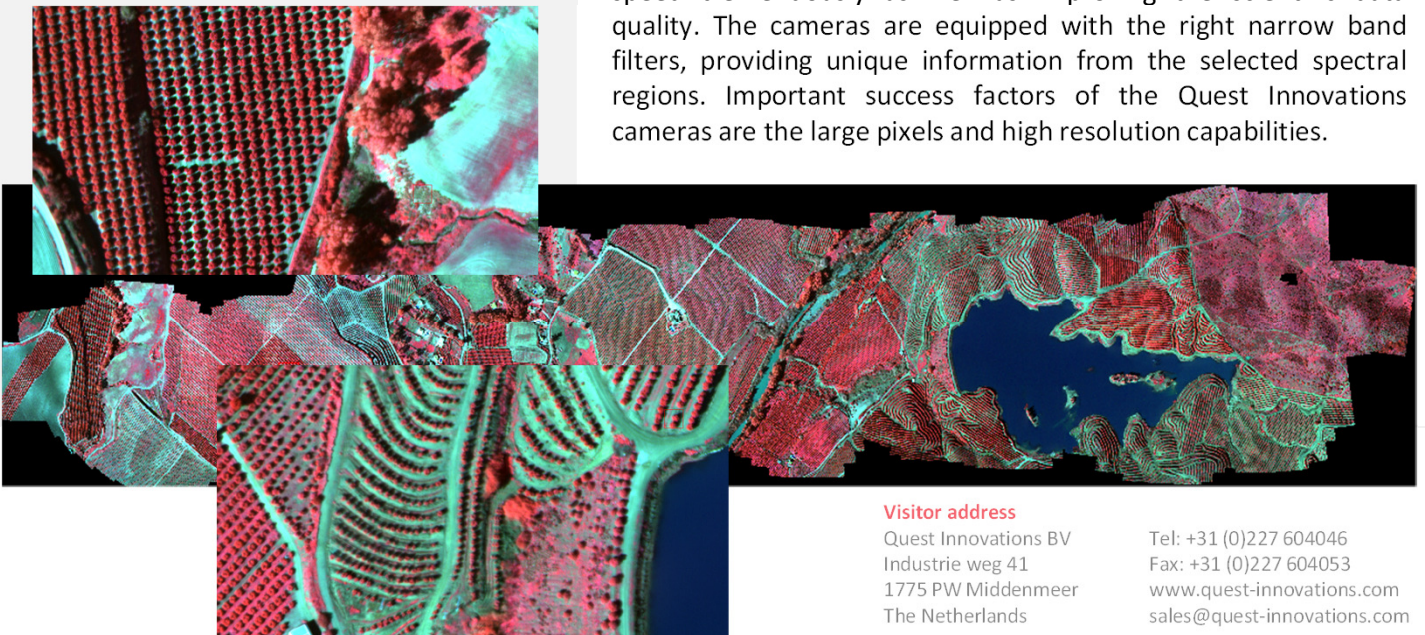


The UAV version of the camera is under design.  
Specs can change in the process.

World's first 5 Channel Multispectral Imager  
solving all the needs for UAV data gathering

**Unmanned Aircraft Systems (UAS) or Unmanned Aerial Vehicles (UAV) are as effective as the information they can collect. The Quest Innovations multispectral cameras are perfectly equipped to do just that; collect highly qualified information in a high resolution which is fast and easy to process.**

Single lens optics result in perfect co-registration of the images. These are easy to stitch to a large mosaic and keeps the precise image size of the images that are taken simultaneously. There is no need to process these simultaneously taken images for shift and deformation artefacts. This increases the post processing speed tremendously as well as improving the scientific data quality. The cameras are equipped with the right narrow band filters, providing unique information from the selected spectral regions. Important success factors of the Quest Innovations cameras are the large pixels and high resolution capabilities.



#### Visitor address

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## Features

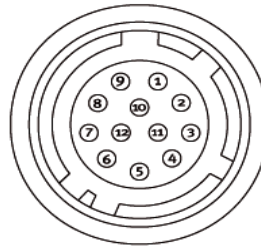
- Individual sensor settings or combined
- Smart Multi sensor trigger capabilities
- Wavelengths: 400 – 1000 nm

## Specifications

Sensor	CMV2000
Active area	2/3" sensor
Pixel size	5.5µm x 5.5µm
Pixel clock	48 MHz
Active pixels	2048 x 1088 (2.1MB)
Frame rate	30 Fps full resolution / 5Fps over GigE
Channels	Channel 1: 400 – 500 nm or Custom
RGBNirNir Prism or	Channel 2: 500 – 590 nm or Custom
20/20/20/20/20 Beam Split	Channel 3: 590 – 670 nm or Custom
prism	Channel 4: 670 – 830 nm or Custom
	Channel 5: 830 –1000 nm or Custom
Alignment accuracy	Better than 1/4 <sup>th</sup> of a pixel
Dynamic range	>56 dB
Bit depths	8 bit 5 channel, 12 bit 5 channel
Gain	X3.2 analog gain + digital gain.
Video output	GigE/ PAL/ SD card
Internal data storage	Flash 64-128 GB
Trigger modes	Internal and external source (on Camera Link and Hirose connectors)
Synchronization	All Sensors clock synchronized. Smart trigger unit for advanced trigger schemes
Electronic shutter	Synchronized exposure with channel independent duration. (1 µs to 1s)
Lookup tables	Lookup tables available in 8bit mode, full access to table entries. Table data can be programmed in flash memory
External control Capability	Gain*, exposure*, lookup tables*, region of
*)Selectable per channel	interest, image bit depth, trigger source
Weight	~1450 grams including 50 mm lens ~1950 grams including 15 mm lens
Dimensions	150 x 130 x 177 mm incl 50 mm lens 150 x130 x 247 mm incl 15 mm lens
Lens mount options	M42 custom lens
Operating temperature	-20 - +50 °C
Regulations	CE (EN 61000-6-2 EN 61000-6-3), FCC Part 15 class B, RoHS/WEE
Back focal length	≥ 59 mm in air
Power	18-24V DC +/-10%, 12W
Humidity	20-90% Non condensing

## Connector

### DC-In / Trigger



Hirose HR10A-10P-12S

Pin	Signal	Function
1	GND	GROUND
2	Vin	+15-24V
3	DNC	Do not connect
4	DNC	Do not connect
5	DNC	Do not connect
6	DNC	Do not connect
7	Trigger in	Input trigger
8	Trigger out	Output trigger
9	DNC	Do not connect
10	DNC	Do not connect
11	DNC	Do not connect
12	DNC	Do not connect

## Dimensions

### High resolution & footprint table

#### 15mm Lens

50m	Footprint	37,56 x	19,95	m/ image
	Resolution	1,83 x	1,83	cm/pixel
100m	Footprint	75,11 x	39,89	m/ image
	Resolution	3,67 x	3,67	cm/pixel
250m	Footprint	187,78 x	99,73	m/ image
	Resolution	9,17 x	9,17	cm/pixel

#### 50mm Lens

50m	Footprint	11,27 x	5,98	m/ image
	Resolution	0,55 x	0,55	cm/pixel
100m	Footprint	22,53 x	11,97	m/ image
	Resolution	1,10 x	1,10	cm/pixel
250m	Footprint	56,34 x	29,92	m/ image
	Resolution	2,75 x	2,75	cm/pixel

## Ordering information

### North America

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