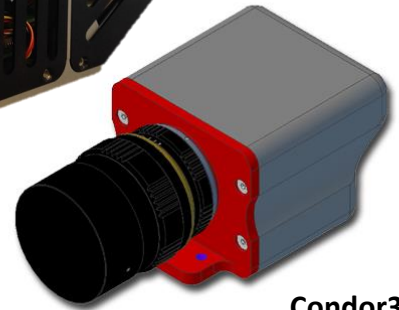




Condor5-UAV



Condor3-UAV

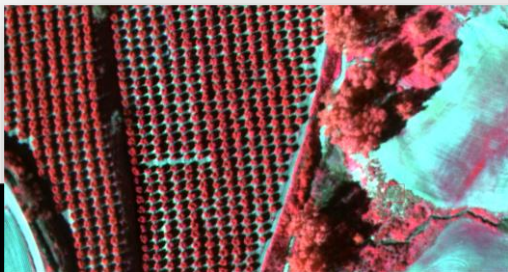
The Condor UAV CAMERAS

Applications

- Precision agriculture
- NDVI / MSR/ MCARI/ TCARI/ PRI measurements
- Fire location
- Foliage evaluation
- Oil spill detection
- Terrain mapping

Benefits

- With apochromatically corrected lenses
- Light weight solution (Condor3)
- In house data storage and PAL output
- High resolution
- Very sensitive (big pixels)
- Pixel to Pixel co registration of sensors
- Easy stitching & fast processing of images
- GPS triggering & Geo-referencing



World's only multi Channel prism based camera line for UAV data gathering

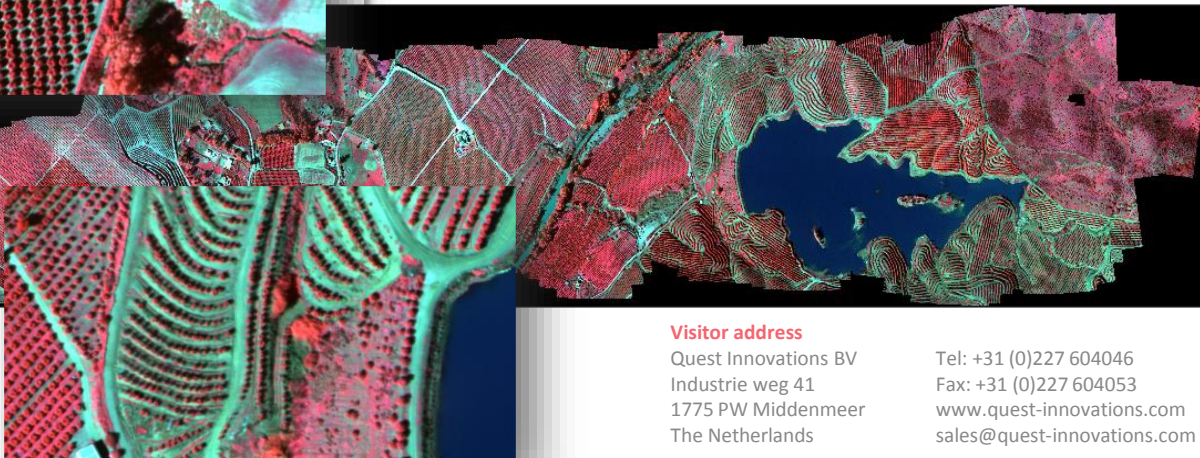
Unmanned Aircraft Systems (UAS) or Unmanned Aerial Vehicles (UAV) are as effective as the information they can collect. The Quest Innovations multispectral cameras are perfectly equipped to do just that; collect highly qualified information in a high resolution which is fast and easy to process.

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

Quest Innovations BV
Industrie weg 41
1775 PW Middenmeer
The Netherlands

Tel: +31 (0)227 604046
Fax: +31 (0)227 604053
www.quest-innovations.com
sales@quest-innovations.com



Features

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

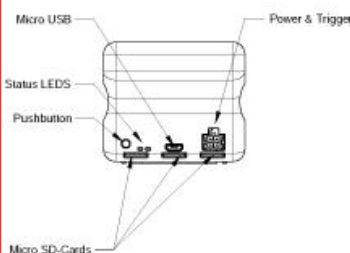
Specifications C3-UAV

Sensor	Sony ICX 692
Active area	1/3" sensor
Pixel size	4.06µm x 4.06µm
Pixel clock	36 MHz
Resolution	2.8MP (1280 x 720 x 3)
Frame rate	5 FPS over SD card
Channels	Channel 1: 400 - 650nm or custom
RGBNir Prism or Beam Split prism (2/3")	Channel 2: 650 - 750 nm or custom Channel 3: 750 - 1000 nm or custom
Alignment accuracy	Better than 1/4 th of a pixel
Dynamic range	>60 dB
Bit depths	8 bit 3 channel, 12 bit 3 channel
Gain	36 dB
Video output	SD card
Internal data storage	3 x Flash 32 GB
Trigger modes	In software + 5v trigger output
Synchronization	All Sensors clock synchronized
External control Capability	Camera settings via micro USB
Weight	350 grams including lens
Dimensions	70 x 60 x 69 (WxHxD) 70 x 60 x 130 (WxHxD) including Lens
Lens mount options	M30 12,8 mm apochromatic lens F1.4
Operating temperature	-20 - +50 °C
Regulations	CE (EN 61000-6-2 EN 61000-6-3), FCC Part 15 class B, RoHS/WEE
Power	7-15V DC
Humidity	20-90% Non condensing

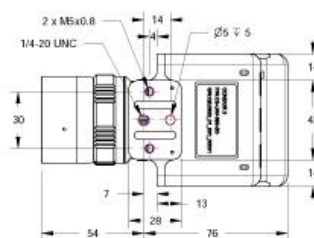
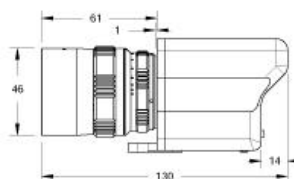
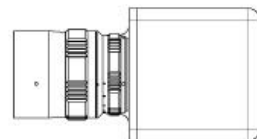
Connector



- 4-channel Molex Micro-Fit 3.0 connector,
- 1x 5v trigger output (optically isolated)
- 1x Micro USB
- 3x Sdcard slots (32GB max)



Dimensions



High resolution & footprint table 692

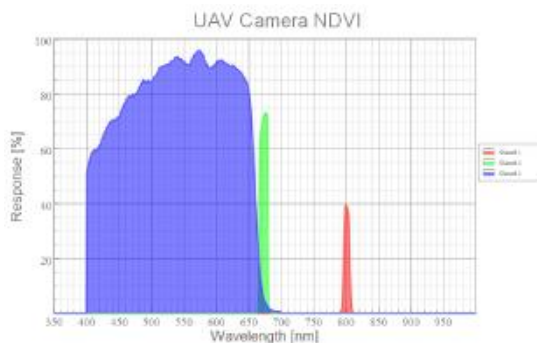
12,8mm Lens				
50m	Footprint	20,30	x	11,42
	Resolution	1,59	x	1,59
100m	Footprint	40,60	x	22,84
	Resolution	3,17	x	3,17
250m	Footprint	101,50	x	57,09
	Resolution	7,93	x	7,93

Ordering information

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Industrieweg 41
1775 PW Middenmeer
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Configuration for NDVI camera:



Features

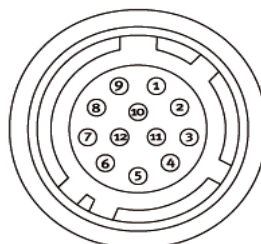
- Individual sensor settings or combined
- Smart Multi sensor trigger capabilities
- Wavelengths: 400 – 1000 nm

Specifications C5-UAV

Sensor	Sony ICX 285
Active area	2/3" sensor
Pixel size	6.45µm x 6.45µm
Pixel clock	48 MHz
Resolution	4.2MP (1360 x 1024 x 3)
Frame rate	5Fps over GigE / 30Fps over CL
Channels	Channel 1: 400 – 500 nm or Custom Channel 2: 500 – 590 nm or Custom Channel 3: 590 – 670 nm or Custom Channel 4: 670 – 830 nm or Custom Channel 5: 830 – 1000 nm or Custom
Alignment accuracy	Better than 1/4 th of a pixel
Dynamic range	>60 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	5 x Flash 32GB
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)Selectable per channel	Gain*, exposure*, lookup tables*, region of 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 x 130 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

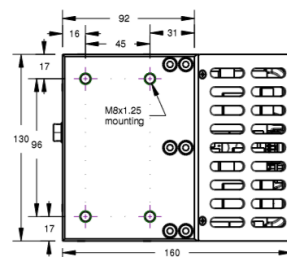
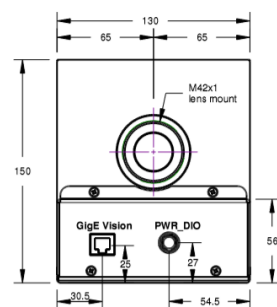
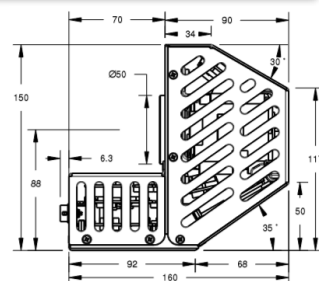
DC-In / Trigger



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	30,00	x	22,33	m/ image
	Resolution element	2,16	x	2,15	cm/pixel
100m	Footprint	60,00	x	44,67	m/ image
	Resolution element	4,31	x	4,29	cm/pixel
250m	Footprint	150,00	x	111,67	m/ image
	Resolution element	10,78	x	10,74	cm/pixel
50mm Lens					
50m	Footprint	9,00	x	6,70	m/ image
	Resolution element	0,65	x	0,64	cm/pixel
100m	Footprint	18,00	x	13,40	m/ image
	Resolution element	1,29	x	1,29	cm/pixel
250m	Footprint	45,00	x	33,50	m/ image
	Resolution element	3,23	x	3,22	cm/pixel

Ordering information



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