VEXCEL
IMAGING

ULTRACAM FALCON MARK 2

Accelerate your business

Your projects completed on time. Every time.

TONY ST-PIERRE
ULTRACAM FALCON CUSTOMER

"The UltraCam Falcon is highly reliable, has a large footprint and produces very beautiful images. It is one of the secrets why our clients keep coming back: We respect the capture schedule and deliver high quality images. To do so, we need an UltraCam."

Optimized productivity and image quality come together in the UltraCam Falcon Mark 2 digital aerial camera system.

Featuring an image footprint of 17,310 x 11,310 pixels across the flight strip, the UltraCam Falcon Mark 2 is the perfect solution for capturing large areas in a short time. Meanwhile, the system's 1.35 second frame interval makes the UltraCam Falcon Mark 2 a versatile system for flying high resolution projects at lower altitudes. Choose from two different focal lengths (70 mm and 100 mm) at the time of purchase for a system. In addition to PAN and RGB channels, the UltraCam Falcon Mark 2 includes a near-infrared channel to support classification projects.

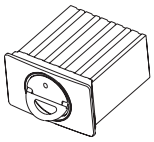
With the UltraCam Falcon systems, you are well equipped to face the challenges of the future: The system can grow with your company and can be upgraded within the photogrammetric nadir UltraCam product line through refurbishment.

Specifications & details

SENSOR SYSTEM

PAN image size	17,310 x 11,310 pixels
PAN physical pixel size	6.0 µm
Color capability (multi-spectral)	4 channels - R, G, B & NIR
Color image size	5,770 x 3,770 pixels
Color physical pixel size	6.0 µm
Pansharpen ratio	1 : 3

Imaging sensor	CCD
Shutter (longlife central leaf)	1/1000 to 1/64
Forward-motion compensation (FMC)	TDI controlled
Maximum FMC capacity	50 pixels
Frame rate (minimum inter-image interval)	1 frame per 1.35 seconds
Dynamic range	> 72 db
Analog-to-digital-conversion at	14 bits



DATA STORAGE SYSTEM

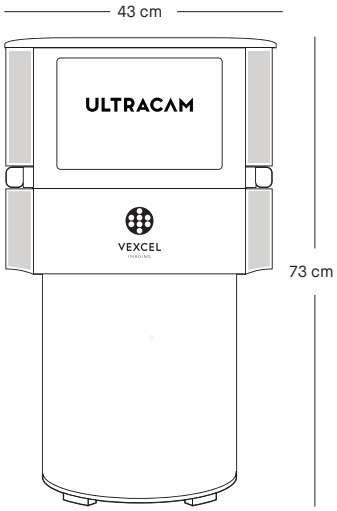
- In-flight exchangeable & redundant storage system: Solid state disk pack
- Data unit storage capacity: 5 TB (up to 5,200 images)[1]
- Input data quantity per image: 787 MB
- Weight of data unit: 2.2 kg

Power consumption: max. 350 W

Weight: 61 kg

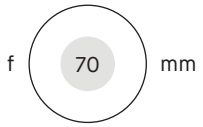
Configuration: Integrated housing concept[2]

Cylinder Diameter: 325 mm

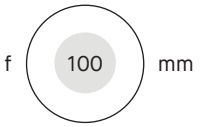


[1] Due to configuration and change in SSD technology, usable storage size may vary and can not be guaranteed.
[2] For separated housing concept options please contact our sales team.

LENS SYSTEM



PAN focal length for photogrammetric applications requiring minimal flight altitude.



PAN focal length for photogrammetric applications, balancing flight altitude and footprint under lean restrictions at the image edges.

	f70	f100
PAN lens system focal length	70 mm	100 mm
PAN lens aperture	f=1/5.6	f=1/5.6
Color (R, G, B & NIR) lens system focal length	23 mm	33 mm
Color (R, G, B & NIR) lens aperture	f=1/5.6	f=1/4.8
PAN total field of view, across track (along track)	73,1° (51,7°)	54,9° (37,5°)
Flying height for PAN pixel size @ 10 cm GSD	1,167 m	1,667 m

OPERATIONAL SPECIFICATION

Flight altitude: ≤ 7000 m above sea level

Humidity: 5 % to 95 % no condensation

Temperature: 0 °C to +45 °C (operation, computer stack) -20 °C to +45 °C (operation, sensor stack) -20 °C to +65 °C (storage)

Mounting: UltraMounts (GSM 4000 & GSM 3000) and most current third party mounts[3]

GNSS/INS/FMS system support: UltraNav (Applanix POSTrack OEM) and most current third party systems[3]

Data processing: UltraMap processing suite including data export in standard formats

[3] Please contact our sales team for detailed information.

BENEFIT FROM OUR TECHNOLOGY

When you partner with Vexcel Imaging,
you get more than a camera.
You get cutting-edge technology combined
with a progressive service concept for con-
stant product upgrades, world-class support
and one-stop solutions.
Today and tomorrow.

Vexcel Imaging GmbH · Anzengrubergasse 8 · 8010 Graz · Austria
www.vexcel-imaging.com