



# The **MK8-3500**

Proven technology, redefined





Compact, robust and clever designed:  
The MK8 Transport case.

# The MK8-Standard

Proven technology, redefined

The now 4th generation of our universal carrier platforms combines proven **MikroKopter** control electronics with a new concept: More power, more flexibility and more security.

The full carbon frame of the **MK8** is easy to disassemble, easy to transport and offers an unprecedented stability. 8 powerful brushless motors guarantee flight times of **nearly 40 minutes** – of course with full redundancy to ensure maximum safety for equipment and pilots.

Redundancy means for the **MK8-3500** that in case of a failure (for example, Lipo, sensor, motor, propeller, flight control, ...) during operation, the copter does not crash. For this reason the **MK8-3500 is designed as Oktokopter**.



The MK8 observes the target area. The pilot can switch between live and thermal images as required.



# The MK8-3500 Thermo

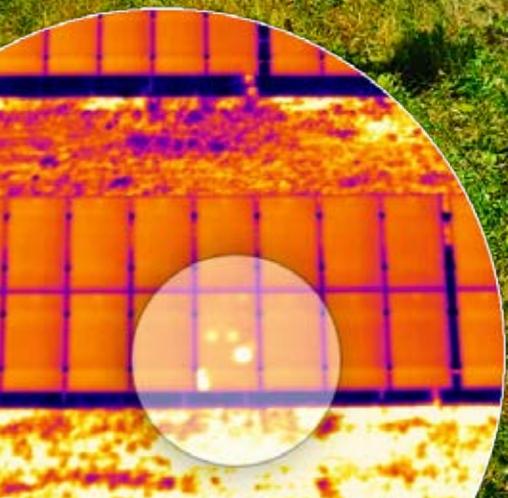
## New perspectives through different eyes

The area Thermography has been evolved in the past years became an important part of our lives. Whether in industrial applications, research and technology, nature and wildlife observation, or agriculture: the area thermography is omnipresent and almost inconceivable.

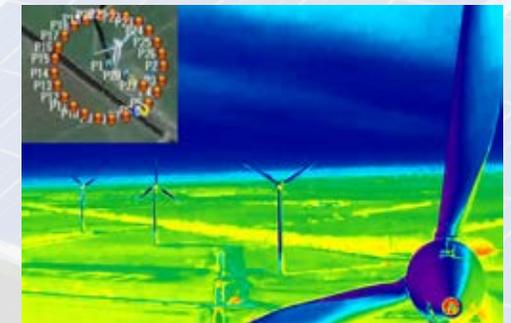
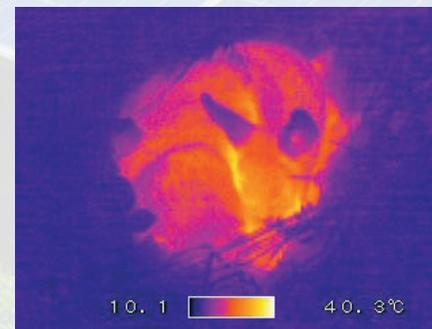
For us, as the Multicopter manufacturer, is the combination of our MikroKopter with thermography solutions from Optris and Flir more than logical. In this field of application the MikroKopter provides completely new perspectives.

### Application areas

- > Inspections of photovoltaic installations
- > Inspections of industrial facilities
- > Heat efficiency analyzes of buildings
- > to support rescue missions
- > Wild animal rescue



On the (live) thermal picture defective panels can be found easily.



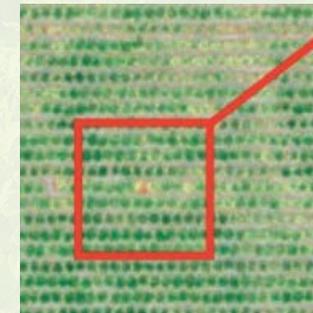
The MK8 observes an Agricultural area.

# The MK8-3500 Agrar Precision Farming

The analysis of cultivated fields are nowadays done with computerized systems by the farmer. The analysis of fields from the air with multispectral cameras is becoming increasingly important. In this way it is i.e. possible to detect a plant infestation very early. For this the Near Infrared Range (NIR) measures the reflectivity of the green light spectrum. With a special software everybody can analyze the condition of their plants.

## Application areas

- > targeted actions against pests
- > efficient fertilizer deploy (economic, prevent over-fertilization)
- > Analyse the vitality of plants (multispectral cameras)
- > Optimization of fertilizer application
- > Shedding of parasitic wasps for pest
- > Visual inspection of areas (FPV camera)



Planing waypoints using our software on a Netbook/Tablet is very flexible and easy to do.

# The MK8-3500 Geo

All-In-One solution in the field of surveying and geodesy

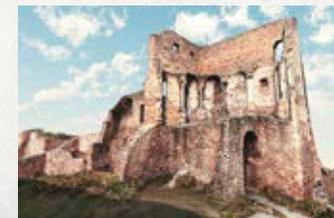
Achieving the necessary amount of points with conventional methods of geodesy and object surveying is only possible with enormous efforts of personell expenses and cost. Furthermore there are also risks to personnel and material.

Our MK8 takes the relevant data in mid-air high above the ground, which makes it possible to effortlessly survey even hard to reach objects. Our solution guarantees an extremely high ground resolution in the range of just few millimeters per pixel.

## Application areas

- > Creation of large-scale orthofotos
- > Generation of detailed height and volume models
- > Creation of 3D models
- > Land surveying and cartography

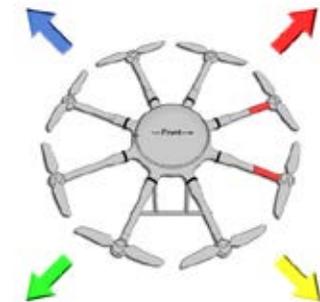
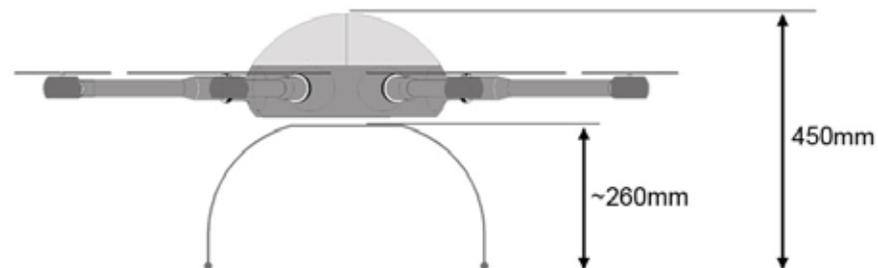
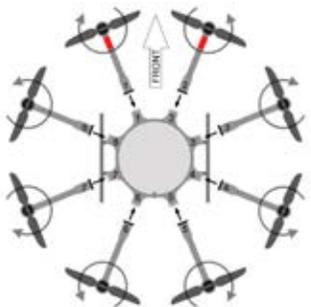
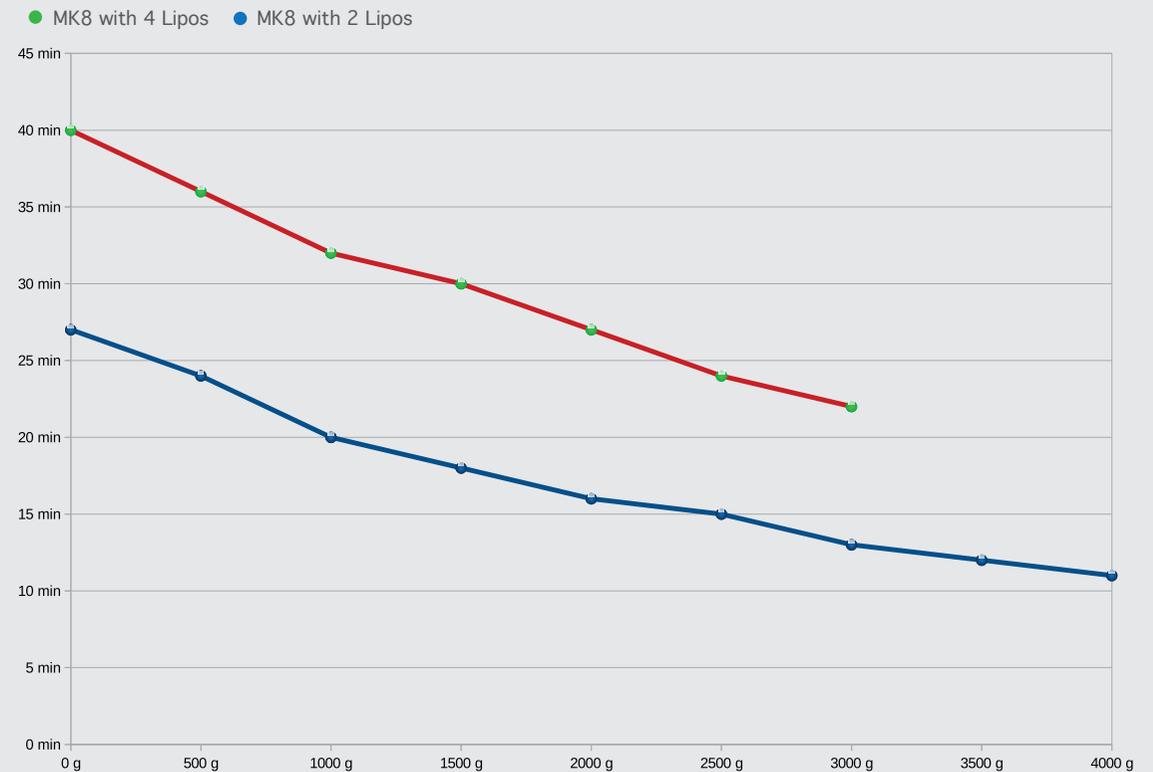
The point clouds generated with the MK8-3500 GEO and the appropriate software reveal the volume of the desired areas.



# Technical specifications

model designation	MK8-3500 Standard
base weight incl. 2 batteries	4350g
weight incl. 2 batteries & SLR1 gimbal	4595g
weight incl. 4 batteries	5652g
weight incl. 4 batteries & SLR2 Gimbal	5897g
max. payload with 4 Lipos	3500g
max. payload with 2 Lipos	2000g
Drive	8 single driven brushless motors (Type: MK4008/350) (with 16" CFK propellers)
Dimensions MK8-3500	aprox. 1085mm x 1160mm x 450mm
Dimensions transport case	aprox. 700mm x 600mm x 400mm
Flight time	up to 40 minutes (incl. Gimbal & 4 batteries)
Range	Depending on the used transmitter / receiver (Range Graupner MX-20/MC-32 incl. receiver GR-16 = 4km)
Altitude	up to 5000m above sea level
Operating temperature range	-5°C to +40°C Batteries loses performance in cold weather performance. The flight time can be reduced accordingly.
Recommended max. Wind speed	up to 3 Beaufort Copter is airworthy up to 6 Beaufort (requires enhanced flight skills)
camera mount	MK HiSight SLR1, 2 axis (Nick & Roll), Servogimbal
battery	High current lithium polymer battery, 4500mAh, 6S

## Flight times



# Equipment of the MK8-3500



The transmitter is an MC32 from Graupner. Incl. Special transmitter console, live image monitor and real-time telemetry with voice output.



With the Polaron charging station, 2 batteries can be charged simultaneously. Part of the MK8-3500 standard are 4 high-performance 6S 4500 mAh lithium polymer flight batteries.



Robust, compact and easy to handle: the clever design of the transport case offers comfort and style with high stability at dimensions of 740 x 620 x 410mm.



The MK "Koptertool" software package (for Windows systems) and the "MikroKopter Tablet Tool" for Android devices. For waypoint-based flight planning and configuration of the drone.



The SLR1: Lightweight, universal camera gimbal for larger SLR cameras. The camera can be compensated by tilt servos in pitch and roll direction.



5.8 Ghz Video RX / TX solution for live image transmission including monitor and battery.



## Camera Gimbals

Depending on the payload of the used drone, different photo, video, thermal imaging cameras, etc. can be used. Depending on the camera type we offer different gimbals solutions.



## HD video transmission

The Amimon CONNEX is the brand-new high-end high-performance system for latency-free Full HD image transmission. With the light air unit, CONNEX is the perfect setup for professional use.



## Training

We offer various possibilities to familiarize you with our drone solutions: From Aerosim simulation software to complex training sessions in our company.



## Netbook Acer Switch 10

The Acer Switch 10 combines all the advantages of a netbook with the user-friendliness and mobility of a tablet.

Plan complex waypoint routes or configure the drone with our software directly on site!



## Cameras & Camera Integration

We support a wide range of cameras and are also convinced to meet your requirements in this area, whether a special trigger solution or a gimbal is needed.



## Training drone „Quadro XL“

Our Training drone, the Quadro XL, uses the same electronics as the MK8, so it is perfect for practice flights. The simple but effective frame construction is robust and easy to maintain.