RiCOPTER

The RiCOPTER is a high-performance unmanned multi-rotor aircraft for professional UAV missions.

Key Facts:

- robust und reliable UAV-platform
- full mechanical and electrical integration of sensor components possible
- carbon fibre main frame, foldable propeller carrier arms, and shock-absorbing undercarriage for stable flights, landings and comfortable transportation
- ***NEW*** **RiCOPTERControl (RiCC):** redundant flight control system developed and produced by *RIEGL*
- remote control Graupner MC32 (2.4 GHz; telemetry supported)
- 433, 868 or 915 MHz command and control link; 5.8 GHz live video downstream
- UN 38.3 certified batteries
- highly versatile and customizable

RiCOPTER®

Remotely Piloted Aircraft System for Multi-Purpose Applications

Robust and reliable unmanned airborne platform for carrying various types of sensors, e.g. laser scanners, photogrammetric cameras, thermal-infrared cameras, hyper-spectral cameras, magnetometers, radiation sensors, gas leak detectors.

RIEGL®

www.riegl.com
www.ricopter.com

RiCOPTER Aircraft Technical Data

Specifications and Performance:

Main Dimensions ready to fly arms folded for transportation & storage	 1,920 mm x 1,820 mm x 470 mm 624 mm x 986 mm x 470 mm
MTOM (Maximum Take-Off Mass)	25 kg
Max. Sensor Load	up to 6.5 kg
Empty Weight	11 kg
Max. tested and permitted Operating Altitude AMSL [1]	up to 3000 m (10,000 ft) [2] [3] [4] (under ISA[5] conditions)
Max. Flight Endurance	up to 30 min [6]
Cruise Speed	typ. 6 - 8 m/sec
Take-off / Landing	VTOL (Vertical Take-off and Landing)
Transmission Range	Remote Control > 1km [7] Command and Control Link > 3 km [7] [8]
RiCOPTER Transportation Case dimensions empty weight	 1,220 mm x 810 mm x 540 mm approx. 20 kg

1) AMSL – Above Mean Sea Level
2) depending on rotor blade configuration
3) For flight altitude above ground level, operational limits for civil unmanned aircraft according to national regulations have to be observed.
4) higher altitude possible with reduced performance
5) ISA – International Standard Atmosphere
6) with 6.5 kg sensor load
7) line-of-sight, 50 m above ground level
8) depending on frequency and local regulations

Limitations:

Max. Ground Speed	14 m/sec [1]
Max. Tolerable Wind Speed	8 m/sec
Max. Climb Rate	5 m/sec [1]
Max. Descent Rate	2 m/sec [1]

1) electronically limited

Hot / Cold Weather Operation:

Min. Operating Temperature	-5°C OAT (Outside Air Temperature)
Max. Operating Temperature	+40°C OAT (Outside Air Temperature)

Remote Control Graupner MC32

easy to carry with integrated handle

Transportation Case: foldable arms facilitate easy transportation and storage

Optional RiCOPTER Components / Accessories

RiCOPTER Ground Station

- professional PELI-Carrying-Case for easy and safe transportation
- monitor for receiving the video stream
- video receiver with 2 antennas
- internal batteries for power supply
- dimensions 525 mm x 437 mm x 217 mm, weight 18.5 kg
- aluminum carrying case for easy and safe transportation
- Ground Station PC for flight planning and configuration of the mission (optional)

RiCOPTER Ground Station

RiCOPTER Charging Control Unit

- professional PELI-Carrying-Case for easy and safe transportation
- equipped with all required connectors and cables
- Power Supply: 100 – 240 VAC / max. 1.200 Watt
- 2 charging slots for max. 10 A each (2 Charging Control Units are recommended)
- charging time: approx. 1 hour for 1 set (4 batteries; 2 Charging Control Units)

Further accessories available (more information on request).

RiCOPTER Charging Control Unit

YouTube

Watch our videos!
youtube.com/rieglims

The RiCOPTER is a high performance unmanned multi-rotor aircraft,
designed & manufactured by *RIEGL* Laser Measurement Systems GmbH.
It is distributed, supported and serviced by RiCOPTER UAV GmbH, also a *RIEGL* company.

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