

RICOPTER[®]



The RICOPTER is a high-performance unmanned multi-rotor aircraft for professional UAS 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
- redundant flight controllers, live video & telemetry downstream
- remote control Graupner MC32 (2.4 GHz; telemetry supported)



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.



www.riegl.com



RIEGL Aircraft Technical Data

Specifications and Performance:

Main Dimensions ready to fly arms folded for transportation & storage	1,920mm x 1,820mm x 470mm 624mm x 986mm x 470mm
MTOM (Maximum Take-Off Mass)	25 kg
Max. Payload (batteries & sensor load together)	up to 16 kg ¹⁾
Empty Weight	9 kg
Max. Operating Altitude AMSL (Above Mean Sea Level)	up to 4000 m (12,000 ft) ^{2) 3) 4)} (under ISA ⁵⁾ conditions)
Max. Flight Endurance	up to 30 min (with 8 kg sensor load)
Cruise Speed	typ. 20 - 30 km/h
Take-off / Landing	VTOL (Vertical Take-off and Landing)
RIEGL Transportation Case dimensions empty weight	1,220mm x 810mm x 540mm approx. 20 kg

1) 8 kg batteries + up to 8 kg sensor load
2) depending on rotor blade configuration
3) based on air pressure and temperature

4) For flight altitude above ground level, operational limits for civil unmanned aircraft according to national regulations have to be observed.
5) ISA – International Standard Atmosphere

Limitations:

Max. Horizontal Air Speed	60 km/h
Max. Tolerable Wind Speed	30 km/h
Max. Climb Rate	6 m/sec
Max. Descent Rate	1.3 m/sec
Max. Descent Speed for smooth landings	0.2 m/sec

Hot / Cold Weather Operation:

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

Optional RIEGL Components / Accessories

RIEGL Ground Station

- monitor for receiving the video stream
- video receiver with 2 antennas
- Panasonic Toughbook for flight planning and configuration of the mission
- internal batteries for power supply
- storage for remote control unit
- dimensions 600 mm x 400 mm x 400 mm, weight 19 kg
- aluminum carrying case for easy and safe transportation

RIEGL Integrated Charging Station

- professional charging station for RIEGL battery set
- 100 – 240 VAC / max. 2.400 Watt
- 4 loading slots for max. 10 A each
- loading time: approx. 1 hour for 1 set (4 batteries)

Further accessories available (more information on request).



Remote Control Graupner MC32



easy to carry with integrated handle



foldable arms facilitate easy transportation and storage



RIEGL Ground Station



RIEGL Integrated Charging Station