NEW RIEGL RiCOPTER
with RIEGL VUX®-1 integrated

350m | 550kHz

RIEGL VUX-1 features

Ready to fly remotely piloted airborne Laser Scanning System:
RIEGL VUX-1 complete LiDAR system solution fully integrated into the high-performance unmanned multirotor aircraft RiCOPTER for professional surveying missions.

NEW RIEGL RiCOPTER
Remotely Piloted Aircraft System for Unmanned Laser Scanning (ULS)

Typical Applications

• Precision Agriculture • Archeology and Cultural Heritage Documentation • Terrain and Canyon Mapping
• Flood Zone Mapping • Surveying of Urban Environments • Topography in Open-Cast Mining • Construction-Site Monitoring
• Power Line, Railway Track, and Pipeline Inspection

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RIEGL®

RIEGL LMS GmbH, Austria | *RIEGL USA Inc.* | *RIEGL Japan Ltd.* | *RIEGL China Ltd.*

RIEGL VUX®-SYS Sensor System

System Components	• *RIEGL* VUX-1 UAS LiDAR sensor • IMU/GNSS unit with antenna • control unit • up to 4 cameras (optional)
***RIEGL* VUX-1 Scanner Performance when integrated in RiCOPTER** Field of View (FOV) max. effective measurement rate max. range @ target reflectivity 20 % minimum range range accuracy eye safety class according to IEC60825-1:2007	 230° up to 350,000 meas./sec 550 m 3 m 10 mm Laser Class 1
IMU/GNSS Unit accuracy Roll, Pitch / accuracy Heading IMU sampling rate position accuracy (typ.)	 0.015° / 0.035° 200 Hz 0.05 m - 0.3 m
Camera Interfaces	4x trigger and event marker

Details to be found in the latest *RIEGL* VUX-1 & VUX-SYS data sheets.

RiCOPTER Aircraft

Main Dimensions arms folded (for transportation & storage) arms unfolded (ready to fly)	 624mm x 986mm x 470mm 1,920mm x 1,820mm x 470mm
MTOM (Maximum Take-Off Mass)	< 25 kg
Max. Payload (batteries & sensors)	up to 16 kg
Max. Operating Flight Altitude AGL	> 500 ft operational limits for civil unmanned aircraft according to national regulations to be observed
Flight Endurance (with max. payload)	> 30 min.
Transportation Case (dimensions)	1,220mm x 810mm x 540mm

RIEGL RiCOPTER Main Features & Key Facts

- robust und reliable airborne scanner carrying platform
- full mechanical and electrical integration of sensor system components into aircraft fuselage
- carbon fibre main frame, foldable propeller carrier arms, and shock-absorbing undercarriage enable stable flight, safe landings and handy transportation
- coaxial array of 4 x 2 propellers enhancing flight stability and failure safety while reducing overall weight

RIEGL RiCOPTER Highlights

foldable arms facilitate easy transportation and storage

Easy to carry with the integrated carrying handle

RiCOPTER ready for take off