



# VERSATILE SOLUTIONS FOR PROFESSIONAL UAV-BASED SURVEYING MISSIONS

Laser scanning from unmanned platforms enables data acquisition in hard-to-reach and/or hazardous areas at an excellent cost-benefit ratio. RIEGL provides the latest technology for this new, dynamically growing field with a broad line of miniaturized, survey-grade airborne laser scanners especially developed for UAV/UAS/RPAS use. Applications cover corridor mapping, pipeline inspection, mining, monitoring, forestry or even archeology and others.

## RIEGL's UAV LIDAR SENSORS



### NEW RIEGL VUX-120

very compact & lightweight 2 kg / 4.4 lbs

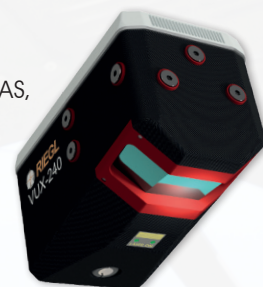
- NFB scanning ( strictly nadir / +10° forward oblique / -10° backward oblique)
- for reliable data collection also on vertical structures and assets
- suitable for installation in small fixed-wing drones
- up to 1800 kHz Laser PRR
- range up to 1430 m @  $\rho \geq 80\%$
- up to 100° FOV
- accuracy 10 mm, precision 5 mm
- up to 15 target returns



### RIEGL VUX-240

compact & lightweight 4.1 kg / 9 lbs

- versatile scanner for use on UAS/UAV/RPAS, helicopter or small manned aeroplane
- up to 1800 kHz Laser PRR
- range up to 2150 m @  $\rho \geq 80\%$
- 75° FOV
- accuracy 20 mm, precision 15 mm
- up to 15 target returns



### RIEGL miniVUX-3UAV/2UAV/1UAV

very compact & lightweight 1.55 kg / 3.4 lbs

- for integration to various small UAVs
- up to 360° FOV
- accuracy 15 mm, precision 10 mm
- up to 5 target returns

#### NEW RIEGL miniVUX-3UAV

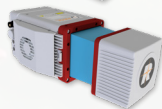
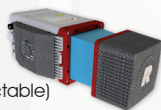
- 300 kHz / 200 kHz / 100 kHz Laser PRR (selectable)
- range up to 330 m @  $\rho \geq 80\%$
- FOV: 120° @ 300 kHz, 180° @ 200 kHz, 360° @ 100 kHz

#### RIEGL miniVUX-2UAV

- 200 kHz / 100 kHz Laser PRR (selectable)
- range @ 200 kHz: up to 280 m @  $\rho \geq 80\%$
- range @ 100 kHz: as given for miniVUX-1UAV

#### RIEGL miniVUX-1UAV

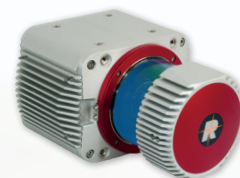
- 100 kHz Laser PRR
- range up to 330 m @  $\rho \geq 80\%$



### RIEGL VUX-1UAV

compact & lightweight 3.5 kg / 7.7 lbs

- versatile and powerful sensor for wide area UAV surveying
- up to 550 kHz Laser PRR
- range up to 1050 m @  $\rho \geq 80\%$
- 330° FOV
- accuracy 10 mm, precision 5 mm
- up to 15 target returns



### RIEGL miniVUX-1DL „Downward-Looking“

compact & lightweight 2.4 kg / 5.3 lbs

- design optimized for fixed-wing aircraft
- 100 kHz Laser PRR
- range up to 260 m @  $\rho \geq 80\%$
- 46° FOV
- accuracy 15 mm, precision 10 mm
- up to 5 target returns



Scan this QR code to watch the RIEGL videos on our YouTube Channel.

[www.riegl.com](http://www.riegl.com)



RICOPTER with RIEGL VUX-SYS Integrated

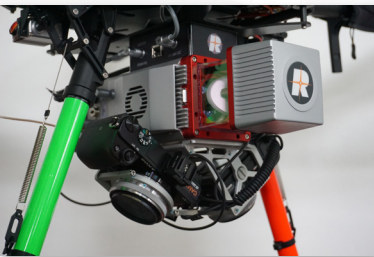
## VARIOUS USER-FRIENDLY SYSTEM INTEGRATION OPTIONS

### RIEGL miniVUX-SYS with APX-15 UAV (especially for fixed-wing UAVs)



Fixed-wing integration example with RIEGL miniVUX-1DL LiDAR Sensor equipped with APX-15 UAV

### RIEGL miniVUX-SYS with APX-20 UAV (for fixed-wing, single-rotor or multi-rotor UAVs)



RIEGL miniVUX-1UAV LiDAR Sensor equipped with APX-20 UAV

### RIEGL VUX-SYS with APX-20 UAV (for UAS/UAV/RPAS, helicopters or small manned aeroplanes)

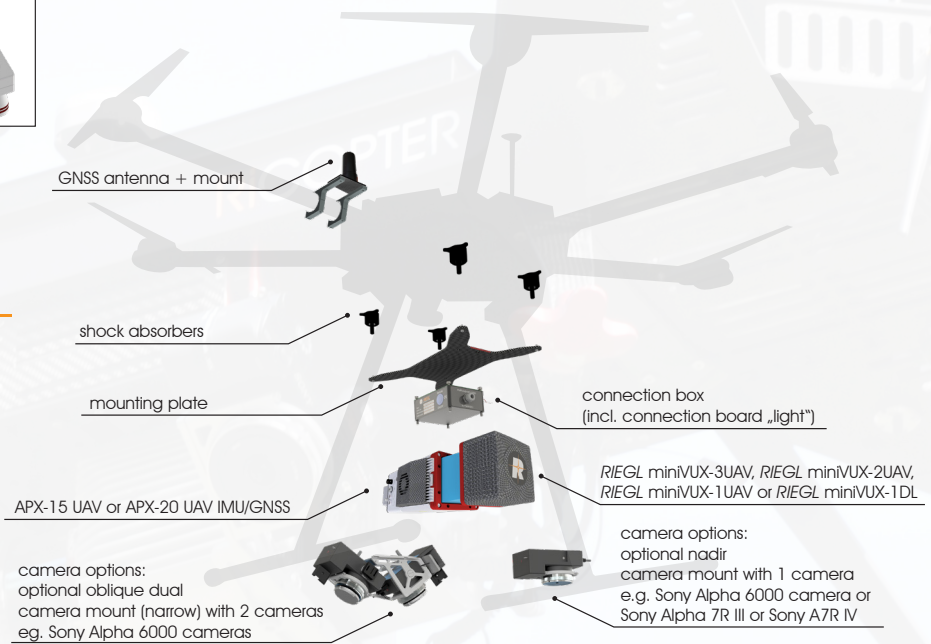


RIEGL VUX-1UAV LiDAR Sensor equipped with APX-20 UAV, Flir Tau 2 thermal camera, and Sony Alpha 7R III camera

multi-versatile system also used for MLS and ALS applications

### RIEGL Integration Kit 600 (for multi-rotor UAVs)

- add-on to the RIEGL miniVUX-SYS coming with shock-absorbing mounting kit, power supply module and cabling
- total weight approx. 0.7 kg (without sensor and camera)
- easy and user-friendly installation



### RIEGL VUX-240 with APX-20 UAV (for UAS/UAV/RPAS, helicopters or small manned aeroplanes)



RICOPTER with RIEGL VUX-240 LiDAR Sensor, APX-20 UAV and nadir RGB camera fully integrated



Watch our videos!  
youtube.com/riegllidar

#### Find your perfect system!

Please contact [sales@riegl.com](mailto:sales@riegl.com) / [info@ricopter.com](mailto:info@ricopter.com) to get more detailed information on the available solutions and to find the system perfectly suited for your application and needs.

The RIEGL UAV LiDAR sensors & systems are 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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