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

ULS

RIEGL VUX-120
very compact & lightweight 2 kg / 4.4 lbs

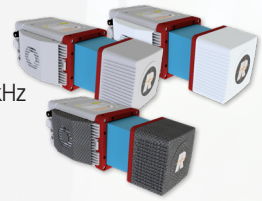
- NFB scanning (strictly nadir / +10° forward oblique / -10° backward oblique)
  for reliable data collection
  also on vertical structures and assets
- suitable for installation in small fixed-wing UAVs
- up to 1800 kHz Laser PRR
- range up to 1430 m @ ρ ≥ 80%
- up to 100° FOV
- accuracy 10 mm, precision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

RIEGL miniVUX-Series
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

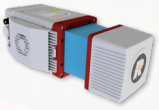
***RIEGL* miniVUX-1 / 2 / 3UAV**

- Laser PRR from 100 kHz to up to 300 kHz (depending on sensor)
- range up to 330 m @ ρ ≥ 80 %



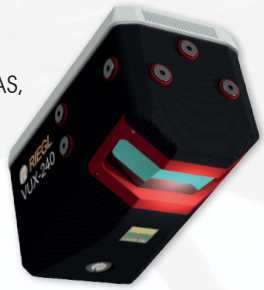
***NEW RIEGL* miniVUX-1LR**

- Laser PRR 100 kHz
- range up to 500 m @ ρ ≥ 80 % and 0.1 klx



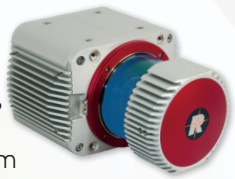
RIEGL VUX-240
compact & lightweight 4.1 kg / 9 lbs

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



RIEGL VUX-1UAV[22] / VUX-1LR[22]
compact & lightweight 3.5 kg / 7.7 lbs

- versatile and powerful sensor for wide area UAV surveying
- up to 1.200 kHz / 1.500 kHz Laser PRR
- range up to 1415 m / 1845 m @ ρ ≥ 80%
- up to 360 ° FOV
- accuracy 10 mm / 15 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 @ ρ ≥ 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

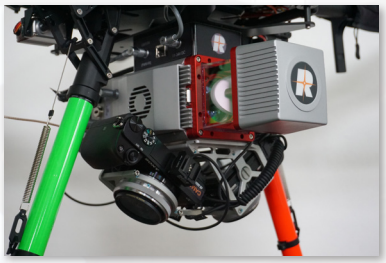
RIEGL®

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

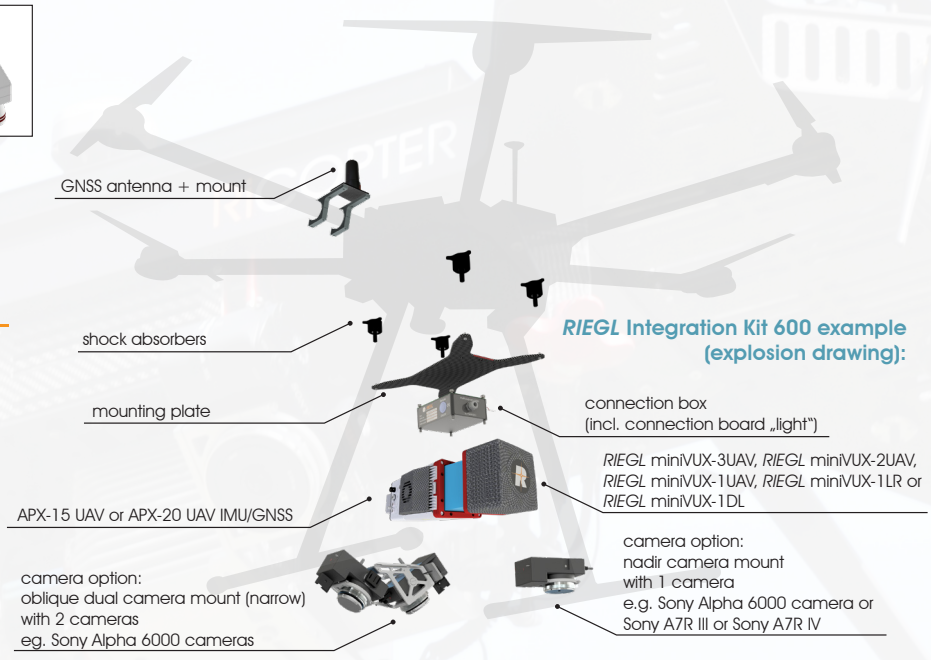
RIEGL miniVUX-SYS with APX-20 UAV
(for fixed-wing, single-rotor or multi-rotor UAVs)



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

RIEGL Integration Kit 600 / Integration Kit 300
(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 / 0.35 kg (without sensor and camera)
- easy and user-friendly installation



***RIEGL* Integration Kit 600 example (explosion drawing):**

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 A7R III camera

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

YouTube
Watch our videos!
youtube.com/rieglidar

Find your perfect system!
Please contact sales@riegl.com / 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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