RIEGL VUX®-1 Series

>> *RIEGL* VUX-1HA
>> *RIEGL* VUX-1UAV
>> *RIEGL* VUX-1LR

RIEGL **VMX-1HA with two integrated VUX-1HA LiDAR sensors**

RIEGL **RiCOPTER equipped with the *RIEGL* VUX-1UAV LiDAR sensor**

RIEGL **VUX-1LR integrated in *RIEGL* VP-1 helicopter pod**

RIEGL VP-1 scan data

High Performance LiDAR Sensors for KINEMATIC Laser Scanning

VUX-1HA (High Accuracy)
Typical Applications

MLS

- indoor and outdoor laser mapping
- tunnel profile measurements
- railway applications like clearance analysis, etc.

VUX-1UAV
Typical Applications

ULS

- topography in open-cast mining
- agriculture and forestry
- terrain and canyon mapping
- corridor mapping

VUX-1LR (Long Range)
Typical Applications

ALS

- corridor mapping: power line, railway track and pipeline inspection
- surveying of urban environments
- archeology and cultural heritage documentation

www.riegl.com

RIEGL®

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

RIEGL VUX®-1HA

- compact, rugged and very lightweight **H**igh **A**ccuracy LiDAR sensor
- easily mountable to whatsoever type of moving platform
- Laser Pulse Repetition Rate PRR > 1 MHz, high accuracy 5 mm

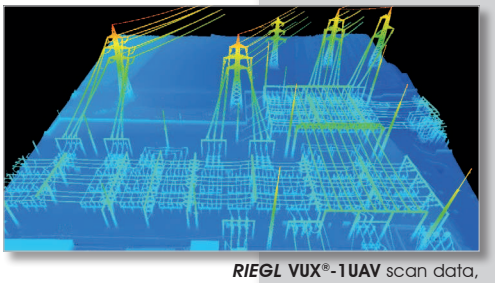
Eye Safety Class	Laser Class 1
Max. Range @ Target Reflectivity 80%	400 m
Max. Range @ Target Reflectivity 10%	150 m
Minimum Range	1.2 m
Accuracy/Precision	**5 mm / 3 mm**
Max. Effective Measurement Rate	**1,000,000 meas./sec**
Max. Scan Speed	250 scans/sec
Field of View (FOV)	**360°**

***RIEGL* VUX®-1HA** scan data, transportation infrastructure mappng at highway speed

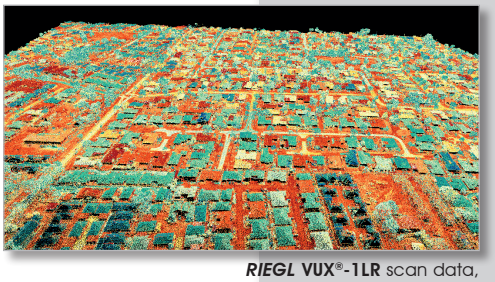
RIEGL VUX®-1UAV

- compact, rugged and very lightweight LiDAR sensor for **UAV** integration
- easily mountable to professional UAS/UAV/RPAS, etc.
- fully integrated system solution *RIEGL* VUX-SYS and RiCOPTER available

Eye Safety Class	Laser Class 1
Max. Range @ Target Reflectivity 60%	**920 m**
Max. Range @ Target Reflectivity 20%	**550 m**
Minimum Range	3 m
Accuracy/Precision	**10 mm / 5 mm**
Max. Effective Measurement Rate	500,000 meas./sec
Max. Scan Speed	200 scans/sec
Field of View (FOV)	330°
Max. Operating Flight Altitude AGL	**350 m / 1,150 ft**



***RIEGL* VUX®-1UAV** scan data, powerline inspection

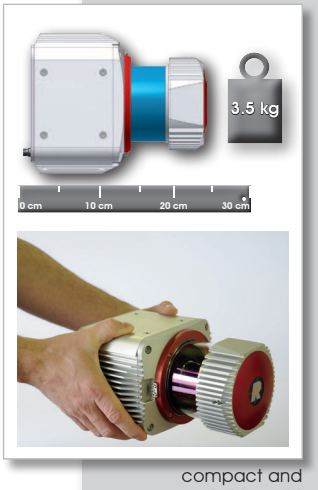


***RIEGL* VUX®-1LR** scan data, urban area

RIEGL VUX®-1LR

- compact, rugged and very lightweight **L**ong **R**ange LiDAR sensor
- ideally suited for airborne surveying from helicopters
- fully integrated system solution *RIEGL* VP-1 Helipod available for user-friendly mounting to helicopters

Eye Safety Class	Laser Class 1
Max. Range @ Target Reflectivity 60%	**1,350 m**
Max. Range @ Target Reflectivity 20%	**820 m**
Minimum Range	5 m
Accuracy/Precision	15 mm / 10 mm
Max. Effective Measurement Rate	**750,000 meas./sec**
Max. Scan Speed	200 scans/sec
Field of View (FOV)	330°
Max. Operating Flight Altitude AGL	**530 m / 1,740 ft**



compact and lightweight

Further Information

RIEGL VUX-1HA Data Sheet

RIEGL VUX-1UAV Data Sheet

RIEGL VUX-1LR Data Sheet

RIEGL VUX-SYS Data Sheet

Watch our videos!
youtube.com/rieglms

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