RIEGL VP-1
with integrated *RIEGL* VUX-SYS

RIEGL VUX-1LR[22] features

The VUX-SYS smoothly fits into the small and lightweight *RIEGL* VP-1 Helicopter Pod, designed to be mounted on standard hard points and typical camera mounts of manned helicopters.
Quick release adapter brackets and minimum external cabling (i.e. power supply, LAN, GNSS antenna) allow quick system installation and removal.

RIEGL VP-1
Helicopter Pod for Airborne Laser Scanning (ALS)

Typical Applications

• Corridor Mapping • 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 • Accident Investigation • Emergency Management Planning

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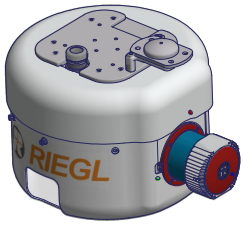
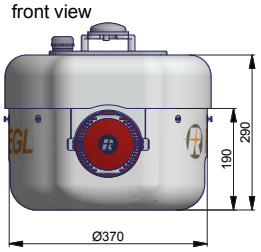
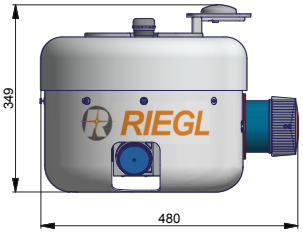
RIEGL VP-1 Technical Data

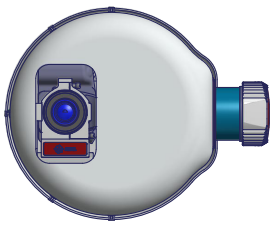




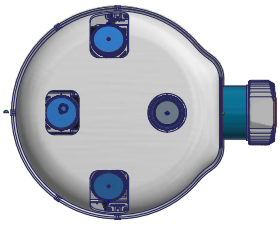


all dimensions in mm

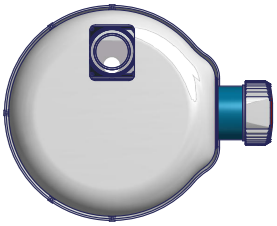
Cameras (optional)



1x Nikon D810 camera integrated



3x Sony Alpha 6000 camera (RGB) and 1x Sony Alpha 6000 camera (NIR) integrated



1x Phase One IXU1000 camera integrated

mounting example on a helicopter (EC135) for power line mapping/inspection

mounting example on BELL Long Range Helicopter

system operation and data acquisition with RiACQUIRE

RIEGL VP-1 Helicopter Pod with GNSS antenna mounted

RIEGL VUX®-SYS Sensor System

System Components	*RIEGL* VUX-1LR[22] or VUX-1UAV[22] LiDAR sensor IMU/GNSS unit with GNSS antenna control unit digital cameras (optional)			
Total Weight	approx. 20 kg (depending on INS/GNSS unit and camera configuration)			
IMU/GNSS Unit	Applanix APX-20 UAV	Applanix AP20	Applanix AP50-Air	Applanix AP60
accuracy Roll, Pitch / Heading	0.015° / 0.035°	0.015° / 0.035°	0.005° / 0.010°	0.005° / 0.015°
IMU sampling rate	200 Hz	200 Hz	200 Hz	200 Hz
position accuracy (typ.)	0.02 m - 0.05 m	0.02 m - 0.05 m	0.02 m - 0.05 m	0.02 m - 0.05 m
Camera Interfaces	trigger and event marker			
Technical Data	quick installation & removal using the existing mounts (e.g. AirFILM Camera System); mounting and operation at enduser's responsibility; area exposed to wind 0.114m²			

Further details to be found on the current *RIEGL* VUX-SYS Data Sheet.

Scanner Performance

LiDAR Sensor	***RIEGL* VUX-1LR[22]**	***RIEGL* VUX-1UAV[22]**
Laser Class	1	1
Max. Effective Measurement Rate	up to 1,500,000 meas./sec	up to 1,200,000 meas./sec
Max. Range @ target reflectivity 20%	1,000 m	755 m
Minimum Range	1.5 m	1.5 m
Accuracy / Precision	15 mm / 5 mm	10 mm / 5 mm
Field of View (FOV)	up to 360°	up to 360°

Class 1 Laser Product according to IEC 60825-1:2014
Further details to be found on the current *RIEGL* VUX-1LR[22] / VUX-1UAV[22] Data Sheet.

YouTube
Watch our videos!
youtube.com/riegllms

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