



The VUX-SYS fits the small and lightweight *RIEGL* VP-1 pod, to be mounted on standard hard points and typical camera mounts of manned helicopters.

Quick release adapter brackets and a minimum of external cabling (i.e. power supply, LAN, GPS antenna) allow quick system installation and removal.

NEW RIEGL VP-1 Helipod for Airborne Laser Scanning (ALS)

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 Accident Investigation Emergency Management Planning



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RIEGL LMS GmbH, Austria

RIEGL USA Inc.

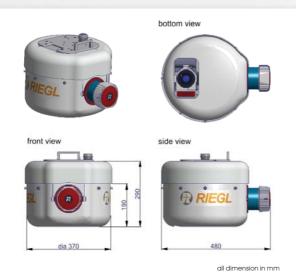
RIEGL Japan Ltd.

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RIEGL VP-1

RIEGL VP-1 Components & Technical Data



System Components:

- RIEGL VUX-1 UAS LiDAR sensor
- IMU/GNSS unit
- GNSS antenna
- Control unit
- digital camera
- connecting cables

Technical Data:

- quick installation & removal using the existing mounts (e.g. AirFILM Camera System); mounting and operation at enduser's responsibility
- total weight approx. 19 kg
- area exposed to wind 0.114 m²

RIEGL VUX®-SYS Sensor System

System Components	RIEGL VUX-1 UAS LiDAR sensor IMU/GNSS unit with antenna control unit digital camera
Scanner Performance	refer to VUX-1 table below
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	trigger and event marker

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

RIEGL VUX®-1 UAS LiDAR Sensor

Eye Safety Class	Laser Class 1
Max. Effective Measurement Rate	up to 500,000 meas./sec
Max. Range @ Target Reflectivity 20%	550 m
Minimum Range	3 m
Accuracy/Precision	10 mm / 5 mm
Field of View (FOV)	up to 330°

Class 1 Laser Product according to IEC60825-1:2007

Further details to be found on the current RIEGL VUX-1 Data Sheet.

RIEGL VP-1 Main Features & Key Facts

- robust und reliable airborne scanner carrying platform
- full mechanical and electrical integration of sensor system components into aircraft fuselage







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Mounting Example: AirFILM Camera System Mount



System Operation and Data Acquisition with RiACQUIRE

