NEW *RIEGL* VPX-1
with integrated *RIEGL* VUX-240

RIEGL VUX-240 features

The *RIEGL* VPX-1 is a lightweight and streamlined pod that carries a complete airborne laser scanning platform for easy and quick mounting on suitable support arms on helicopters.

Being perfectly suited for corridor mapping applications the platform consists of a *RIEGL* VUX-240 airborne laser scanner, three Sony Alpha high resolution digital cameras and a high-end IMU/GNSS system. The airborne laser scanner's high effective repetition rate of 1.5 million measurements on the ground and the oblique orientation of the cameras (Forward/Nadir/Backward) especially account for the specifics of power line mapping applications, but also make it a perfect tool for high-density city mapping at altitudes of up to 1200m.

RIEGL VPX-1 with VUX-240
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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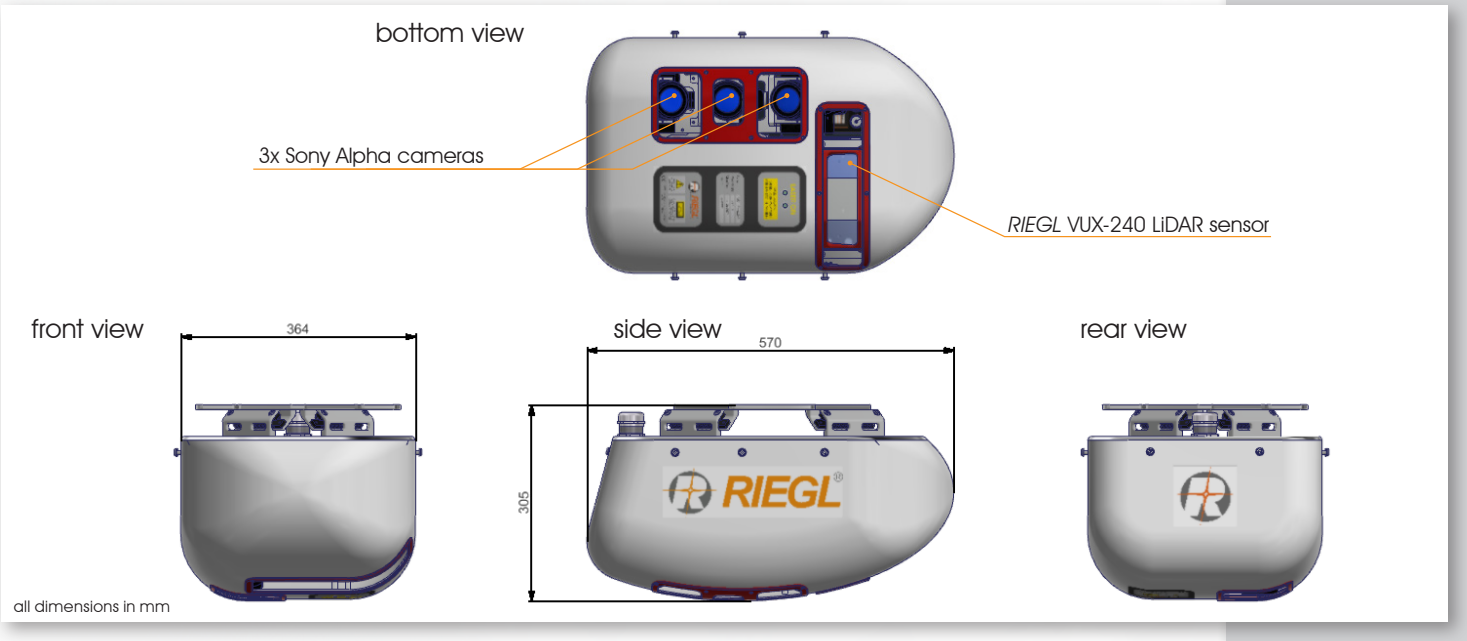
RIEGL®

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

RIEGL VPX-1 with VUX-240 Technical Data



all dimensions in mm

RIEGL VUX®-240 Sensor System

System Components	*RIEGL* VUX-240 LiDAR sensor IMU/GNSS unit with GNSS antenna control unit digital cameras (optional)	
Scanner Performance	refer to VUX-240 table below	
Total Weight	approx. 20 kg (depending on camera configuration)	
IMU/GNSS Unit	Applanix AP20	Applanix AP60
accuracy Roll, Pitch / Heading IMU sampling rate position accuracy (typ.)	0.015° / 0.035° 200 Hz 0.05 m - 0.3 m	0.002° / 0.005° 200 Hz 0.05 m - 0.1 m
Camera Interfaces	trigger and event marker	
Camera Orientation Angles forward / nadir / backward	-20° / 0° / +20°	
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	

RIEGL VUX-240
Airborne Laser Scanner

RIEGL VPX-1 Helicopter Pod
with VUX-240 and 3 Sony Alpha
high resolution digital cameras

RIEGL VUX®-240 LiDAR Sensor

Laser Class	3R
Max. Effective Measurement Rate	up to 1,500,000 meas./sec
Max. Range @ target reflectivity 20%	1200 m
Minimum Range	5 m
Accuracy / Precision	20 mm / 15 mm
Field of View (FOV)	75°

Class 3R Laser Product according to IEC60825-1:2014
The following clause applies for instruments delivered into the United States: Complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed.3., as described in Laser Notice No. 56, dated May 8, 2019.

system operation and
data acquisition with RiACQUIRE

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