

# YellowScan Vx-DL.



## The high precision & long-range LiDAR solution for UAVs

YellowScan's commitment is to provide the best integrated LiDAR systems and outstanding customer support for demanding UAV applications.

YellowScan Vx-DL is a lightweight turn-key LiDAR system specifically designed to meet the needs of corridor mapping.

The "downwardlooking" field of view provides a very high point density and is ideal for linear projects such as powerline and pipeline surveillance or roadway and railway infrastructure inspection.



Technologies inside

applanix | RIEGL



Key differentiators

- ▶ Optimized for fast-moving platform
- ▶ Dedicated to linear infrastructure scanning



UAV Integrations

- ▶ Multirotor drones
- ▶ Helicopter drones
- ▶ Fixed-wings

## Technical specifications.

Scanner	RIEGL miniVUX-1DL
Wavelength	905 nm
Precision <sup>(1) (3)</sup>	1 cm
Accuracy <sup>(2) (3)</sup>	2.5 cm
Scanner field of view	46°
Shots per second	100k
Echoes per shot	Up to 5
GNSS-Inertial solution	Applanix APX-20 UAV

## Package includes.

- ✓ Pelican case containing:
  - ▶ YellowScan Vx-DL
  - ▶ Charger and 2 batteries
  - ▶ GNSS antenna and cable
  - ▶ 2 USB flash drive
  - ▶ Documentation
- ✓ Boresight calibration certificate
- ✓ 1-year warranty
- ✓ In-person training
- ✓ Worldwide technical and operational support

## General characteristics.

Weight	4.1 kg (9 lbs) battery included
Autonomy	45 minutes typ.
Power consumption	50 W
Operating temperature	-20 to +40 °C
Size	L 42 x W 11 x H 19 cm

(1) Precision, also called reproducibility or repeatability, accounts for the variation in successive measurements taken on the same target.

(2) Accuracy is the degree of conformity of a measured position to its actual (true) value.

(3) One  $\sigma$  @ 50 m, nadir.




### ✓ Software:

- ▶ Applanix POSPac UAV, to post-process GNSS and inertial data for highest accuracy
- ▶ YellowScan CloudStation, to generate and visualize your georeferenced point cloud

### Optional:

- ▶ Mounting bracket with single Sony  $\alpha$ 6000 camera
- ▶ YellowScan LiveStation, the real-time in-flight LiDAR monitoring kit (software + 2 radio-modems)
- ▶ Warranty and technical support extensions

## Typical mission parameters.

	FLIGHT SPEED 5 m/s
	ALTITUDE 60 m
	SWATH 50 m

