

# YellowScan Surveyor Ultra.

The high density and long range  
UAV LiDAR solution

YellowScan Surveyor Ultra provides the highest point density from YellowScan's product range.

It combines long range, high density and lightness which makes it ideally suited for high speed UAVs such as VTOL or helicopter drones.



Technologies inside

**applanix**

Velodyne LiDAR



**Key differentiators**

- ▶ High point density
- ▶ Maximized range
- ▶ Productivity solution
- ▶ Optimized for fixed-wing used



**UAV Integrations**

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

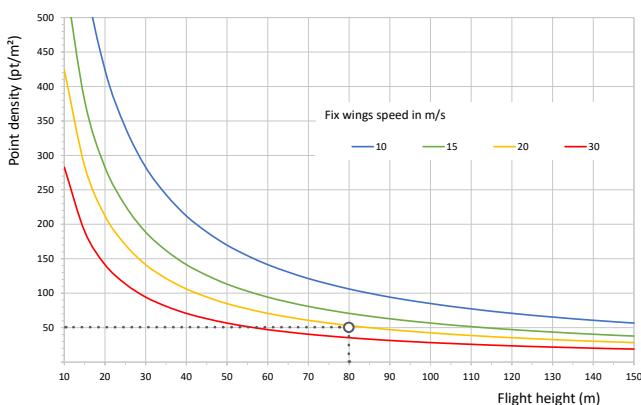
## Technical specifications.

Scanner	Velodyne VLP-32
Wavelength	903 nm
Precision <sup>(1) (3)</sup>	10 cm
Accuracy <sup>(2) (3)</sup>	5 cm
Scanner field of view	360°
Shots per second	600k
Echoes per shot	Up to 2
GNSS-Inertial solution	Applanix APX-15 UAV

## Package includes.

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

## Typical mission parameters.



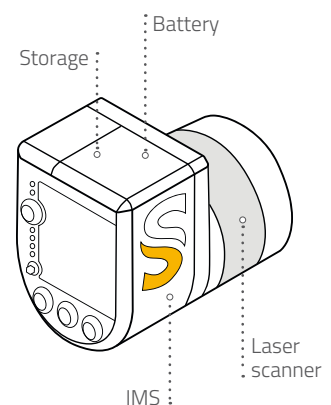
FLIGHT SPEED  
**18 m/s**



ALTITUDE  
**80 m**



SWATH  
**340 m**



## General characteristics.

Weight	1.7 kg (3.75 lbs) battery included
Autonomy	1.2 hours typ.
Power consumption	19 W
Operating temperature	-10 to +40 °C
Size	L 18 x W 10.5 x H 14 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 or dual Sony  $\alpha$ 6000 camera for DJI M600
- ▶ YellowScan LiveStation, the real-time in-flight LiDAR monitoring kit (software + 2 radio-modems)
- ▶ Warranty and technical support extensions