

# YellowScan Fly & Drive.

**Fly when you can,  
Drive when you must.**

The YellowScan Fly & Drive is a versatile land vehicle-mounted or UAV-mounted mobile mapping system.

It combines high resolution laser scanning and precise positioning to collect geo-referenced point clouds for a wide range of applications.

Solution designed in partnership with  MicroGeo 



## Key features

- ▶ Multi-scope mobile (ground) and UAV (airborne) mapping systems
- ▶ Precision positioning using high end GNSS and IMU coupled system
- ▶ Easy to use, easy to install, light weight and low power consumption
- ▶ Installation on any kind of UAVs and vehicles



## Integrations

- ▶ Multirotor drones
- ▶ Fixed-wings
- ▶ Land vehicles

# Technical specifications.

## LiDAR UNIT <sup>(1)</sup>

## YELLOWSCAN SURVEYOR

### LASER SCANNER

Type	Velodyne VLP-16
Precision <sup>(2)(4)</sup>	4 cm
Accuracy <sup>(3)(4)</sup>	5 cm
Scanner field of view	360°
Maximum range	100m
Shots per second	300k
Typical driving speed	25km/h

### IMU / GNSS

GNSS-Inertial solution	Applanix APX-15
Multiconstellation	GPS, GLONASS, GALILEO, BEIDOU
Dual dynamic model	Airborne / Mobile mapping
Antenna	GNSS L1/L2 survey grade

### GENERAL SPECIFICATIONS

Weight: Airborne config.	1.6 kg battery included
Weight: Mobile config.	5.6 kg battery included
Dimension: Airborne config.	L 16 x W 10.5 x H 14 cm
Dimension: Mobile config.	L 35 x W 57 x H 48 cm

(1) For more information about each LiDAR system, please refer to their respective datasheets.  
 (2) Precision, also called reproducibility or repeatability, accounts for the variation in successive measurements taken on the same target.  
 (3) Accuracy is the degree of conformity of a measured position to its actual (true) value.  
 (4) Post-processed solution, without GNSS outage.

## YELLOWSCAN SURVEYOR ULTRA

Type	Velodyne VLP-32
Precision <sup>(2)(4)</sup>	10 cm
Accuracy <sup>(3)(4)</sup>	5 cm
Scanner field of view	360°
Maximum range	200m
Shots per second	600k
Typical driving speed	50km/h

GNSS-Inertial solution	Applanix APX-15
Multiconstellation	GPS, GLONASS, GALILEO, BEIDOU
Dual dynamic model	Airborne / Mobile mapping
Antenna	GNSS L1/L2 survey grade

Weight: Airborne config.	1.7 kg battery included
Weight: Mobile config.	5.7 kg battery included
Dimension: Airborne config.	L 18 x W 10.5 x H 14 cm
Dimension: Mobile config.	L 35 x W 58.5 x H 48 cm

(3) Accuracy is the degree of conformity of a measured position to its actual (true) value.  
 (4) Post-processed solution, without GNSS outage.

# Package configuration.

## ✓ What's included:

### HARDWARE

- ▶ YellowScan Surveyor or Surveyor Ultra with Fly & Drive option
- ▶ Fly & Drive car pod
- ▶ Mounting bracket compatible with UAV & land vehicles
- ▶ GNSS antenna and cable

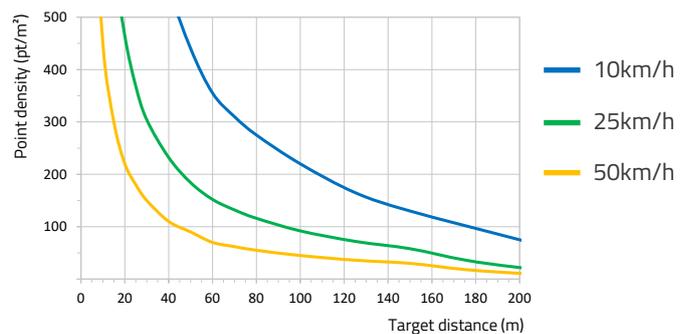
### SOFTWARE

- ▶ Applanix POSPac MMS
- ▶ YellowScan CloudStation

## ⊕ Optional:

- ▶ Single or dual camera options for DJI M600
- ▶ 360° panoramic camera for vehicle mounting
- ▶ DMI (odometer)
- ▶ Power supply cable for vehicle
- ▶ YellowScan LiveStation

Surveyor Ultra - Point density vs Target distance



Surveyor - Point density vs Target distance

