



# YellowScan Mapper.



## Jump into the LiDAR revolution.

Easy mapping redefined.

Start your LiDAR journey with our easy-to-use Mapper system. Its low weight, mid-range capability, high point density, as well as advanced accuracy and precision, make this LiDAR system the best value for money.



Technologies inside

applanix

LIVOX



Key differentiators

- Adaptable to smaller UAVs
- Easy & efficient mapping
- "Plug and play" camera module option



UAV Integrations

- Single-rotor UAV
- Multi-rotor UAV
- VTOL UAV

# Technical specifications.

Laser scanner	Livox Horizon
GNSS inertial solution	Applanix APX-15 UAV
Precision <sup>(1)(3)</sup>	4 cm
Accuracy <sup>(2)(3)</sup>	4 cm
Typ. flight speed	10 m/s
Typ. flight height	60 m
Max. rec. flight height	70 m
Point density	230 pts/sqm @ 60m AGL 10 m/s
Laser range	Up to 130 m
Laser wavelength	905 nm
Scanner field-of-view	81.7°x 25.1°

(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.

Max. data generated <sup>(4)</sup>	480 000 points/sec
Echoes per shot	Up to 2
Shots per second	Up to 240 000
Scanning frequency	Up to 10 Hz
RGB camera	Optional
Weight	1.3 kg (2.9 lbs) batt. excl.
Size	L 143 x W 98 x H 149 mm
Battery autonomy	1 hour typ.
Power consumption	19 W
Operating temperature	-10 to +40 °C

(3) 1σ @ 50 m, nadir.

(4) Theoretical maximum of points with all shots yielding the maximum number of echoes. May vary depending on flight and survey conditions, and surveyed environment.

## Package includes.


### ✓ Hardware :

- YellowScan Mapper
- Quick release mounting mechanism (DJI skyport or Gremsy)
- 2 batteries
- GNSS antenna and cable
- 2 USB flash drives
- Rugged backpack

### ✓ Services :



- 1-year warranty & unlimited technical support
- In-person or online training
- Boresight calibration certificate

### ✓ Software :

- Applanix POSPac to post-process GNSS and inertial data for highest accuracy
- **CloudStation Essential**  Visualize, inspect, colorize from orthophotos, and export your data.

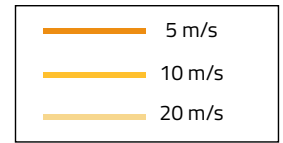
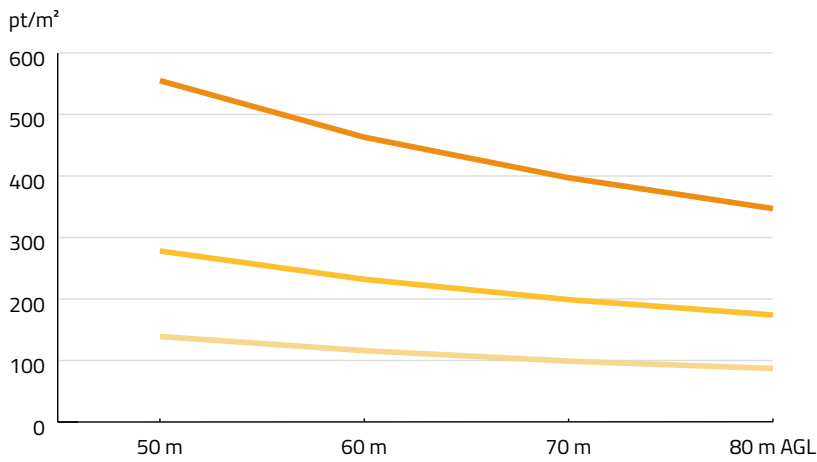
### + Optional accessories and enhancements :

- Stand-alone mounting bracket for DJI M600/300/ M210
- YellowScan LiveStation: the real-time in-flight LiDAR monitoring kit (includes software & 2 radio-modems)
- Warranty and technical support extensions
- Single-camera module (RGB)

- **CloudStation Pro**  Visualize, inspect, refine your data quality, enrich your data with classification and color, and unlock more export features.
- **CloudStation Ultimate**  Zero compromise, all features activated. Includes Orthophoto generation and Command Line (ytk) processing for automation & batching.



## Typical mission parameters.



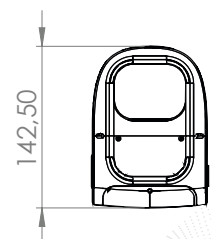
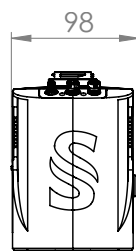
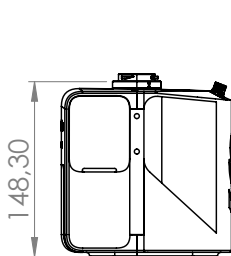
	50 m	60 m	80 m
5 m/s	555	463	347
10 m/s	278	232	174
20 m/s	139	116	87

Point density (pt/m<sup>2</sup>)

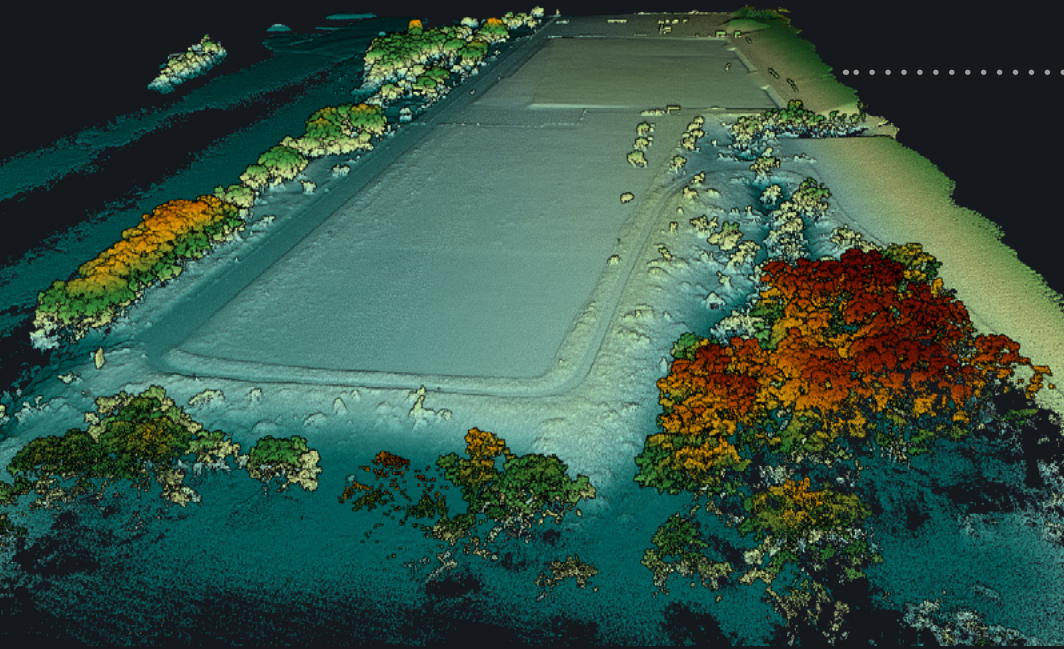


## Dimensional drawings.

ⓘ Dimensions expressed in millimeters



# Typical point cloud snapshots.



## Mapper

- Platform: Multi-rotor UAV
- Flight height: 70 m AGL
- Speed: 5 m/s



## Mapper

- Platform: Multi-rotor UAV
- Flight height: 60 m AGL
- Speed: 8 m/s