

YellowScan Voyager.



Precision meets reality.

Complete more mission profiles with the YellowScan Voyager.

The Voyager's 100° FOV laser scanner and its extremely fast data acquisition rate of up to 2400 kHz while keeping top-of-the-line precision and accuracy makes this solution the best option for projects requiring both high density and quality.



Technologies inside

applanix

RIEGL



Key differentiators

- Up to 2 million shots/second
- Up to 32 echoes
- Multi-platform



Integrations

- Single-rotor UAV
- Multi-rotor & VTOL UAV
- Light Crewed Aircrafts

Technical specifications.

Laser scanner	RIEGL VUX-120 ²³
GNSS inertial solution	Applanix AP+ 30 AIR or AP+ 50 AIR
Precision ⁽¹⁾⁽³⁾	0.5 cm
Accuracy ⁽¹⁾⁽³⁾	1 cm
Typ. flight speed (UAV)	10 m/s
Typ. flight height (UAV)	120 m
Max. rec. flight height	440 m
Point density (PRR 1800 kHz)	525 ppsqm @ 120m 10m/s
Laser range	Up to 1250 m
Laser wavelength	1550 nm
Scanner field-of-view	100° x 20°

(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 ⁽⁴⁾	12 000 000 points/sec
Echoes per shot	Up to 32
Shots per second	Up to 2 400 000
Scanning frequency	Up to 400 Hz (selectable)
RGB camera	Optional
Weight	3.5 kg (7.7 lbs) batt. excl.
Size	L 369 x W 117 x H 183 mm
Battery autonomy	1 hour typ.
Power consumption	98 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 Voyager (AP+ 30 Air or AP+ 50 Air IMU option)
- Rugged pelicase
- 2 Batteries
- GNSS antenna and cable
- 2 USB flash drives
- Documentation

✓ Services :

- 1-year warranty & unlimited technical support
- In-person or online training
- Bore sight 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 :

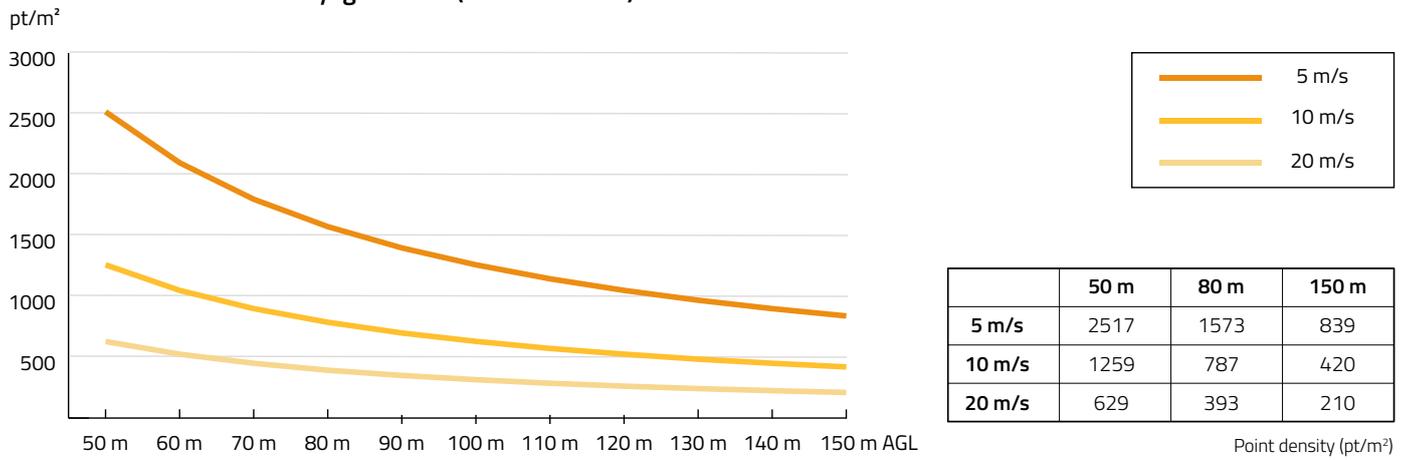
- Universal Mounting Bracket (quick hooks or gremsy connector available)
- YellowScan LiveStation: the real-time in-flight LiDAR monitoring kit (includes software & 2 radio-modems)
- Warranty and technical support extensions
- Single- or Dual-camera modules (RGB)

- **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.

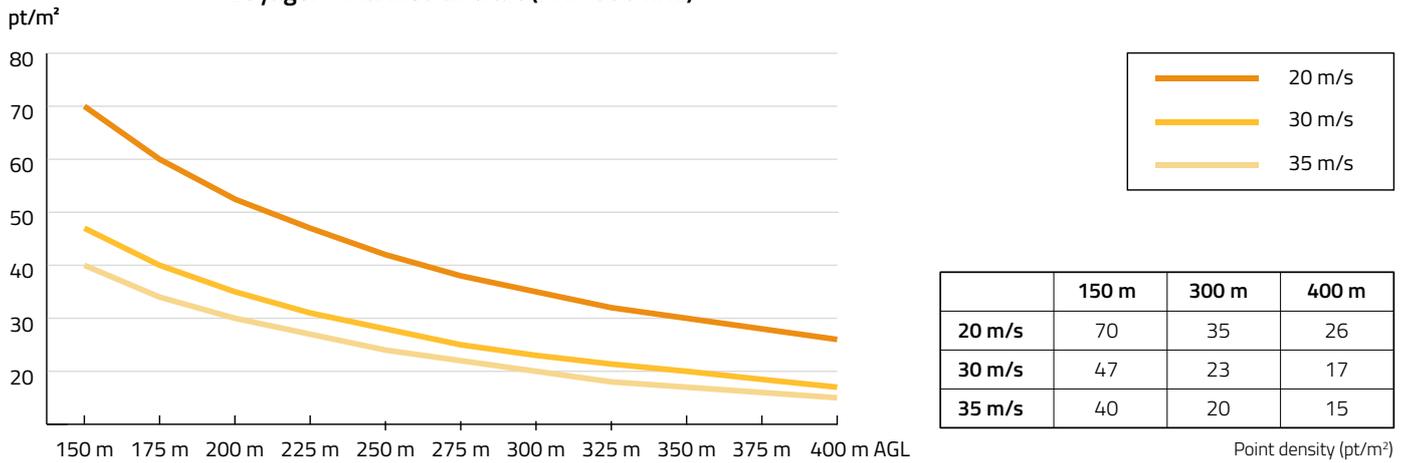


Typical mission parameters.

Voyager - UAV (PRR 1800 kHz)

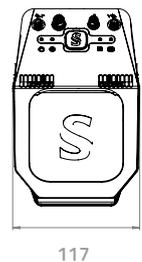
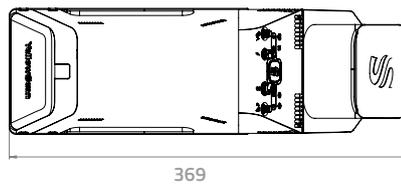
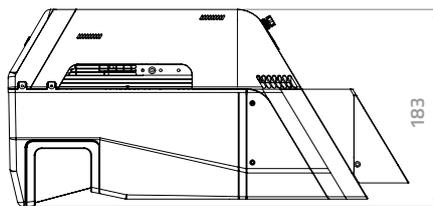


Voyager - Manned aircraft (PRR 600 kHz)

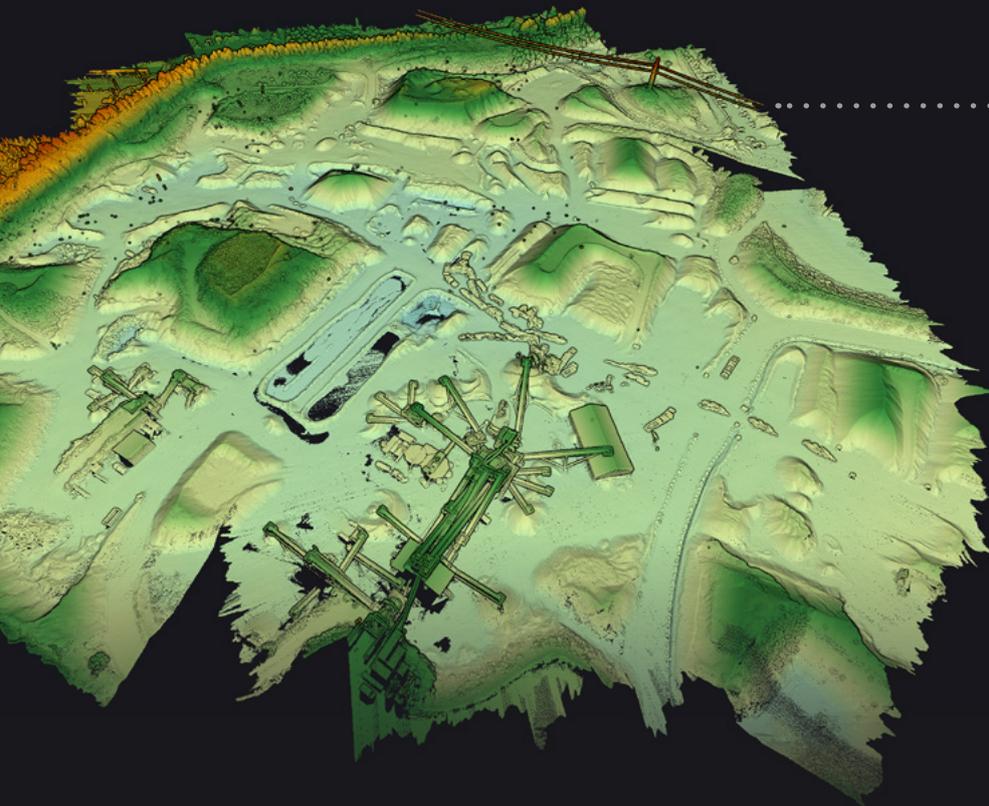


Dimensional drawings.

ⓘ Dimensions expressed in millimeters



Typical point cloud snapshots.



Voyager @1800 kHz PRF

- Platform: Multi-rotor UAV
- Flight height: 80 m AGL
- Speed: 5 m/s



Voyager @1800 kHz PRF

- Platform: Multi-rotor UAV
- Flight height: 80 m AGL
- Speed: 5 m/s

