



YellowScan Voyager.

Precision meets reality.

The YellowScan Voyager is our highest range LiDAR solution, with a range of up to 440m.

Its laser scanner's wide field of view of 100° and its extremely fast data acquisition rate of up to 2.4 MHz, makes this solution the best option for projects requiring the highest point density.



Technologies inside

aplanix | RIEGL



Key differentiators

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



Integrations

- ▶ Single rotor UAV
- ▶ Multirotor & 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 ⁽²⁾⁽³⁾	1 cm
Typ. flight speed	30 m/s
Typ. flying height	300 m
Max. rec. flying height	440 m
Point density ⁽⁴⁾	24 pts / sqm @ 300 m AGL 30 m/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, is the degree to which further measurements show the same result.

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

Max. data generated ⁽⁵⁾	12 000 000 points/sec
Echoes per shot	Up to 32
Shots per second	Up to 2 000 000
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
Autonomy	1 hour typ.
Power consumption	55 W
Operating temperature	-10 to +40 °C

(3) One sigma @ 150 m range under RIEGL test conditions. Accuracy and precision given for AP+50 Air IMU configuration.

(4) Laser Pulse Repetition Rate PRR @ 600 kHz

(5) 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 unlimited technical support
- ▶ 1-year warranty
- ▶ In-person or online training
- ▶ Boresight calibration certificate



✓ Software:

- ▶ Applanix POSPac MMS, to post-process GNSS and inertial data for highest accuracy
- ▶ YellowScan CloudStation Essential to generate, visualize, inspect, and export your data

⊕ Optional:

- ▶ CloudStation Pro: refine and improve your data quality, with more export options
- ▶ Warranty and technical support extensions
- ▶ Optional 20 MP or 60 MP single camera module
- ▶ Optional 35 MP dual-camera module
- ▶ Stand-alone mounting bracket for DJI M600