YellowScan

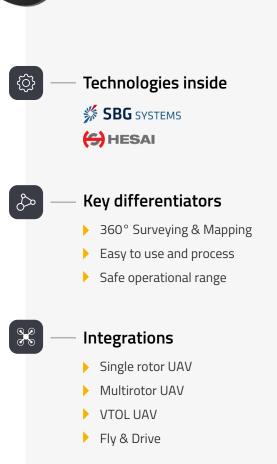
Designed to innovate.

YellowScan Surveyor Ultra.

Lightweight 360° LiDAR system for UAV integration

The YellowScan Surveyor Ultra marks a new generation of YellowScan LiDAR systems integrating SBG Systems' IMU, combined with an integrated RGB camera for colorization purposes.

Combining light weight and high density, its flexiblity makes a great addition anywhere.



Technical specifications.

Laser scanner	Hesai XT32M2X
GNSS inertial solution	SBG Quanta Micro
Precision ⁽¹⁾	3 cm
Accuracy ⁽²⁾	2.5 cm
Typ. flight speed	10 m/s
Typ. flying height	100 m
Max. rec. flying height	140 m
Point density	60 pts/sqm @ 100m AGL 10 m/s
Laser range	Up to 300 m
Laser wavelength	905 nm
Scanner field-of-view	360° x 40.3°

Package includes.

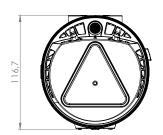
✓ Hardware:

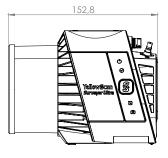
- YellowScan Surveyor Ultra Þ
- Þ 2 Batteries
- Rugged pelicase Þ
- UAV GNSS antenna and cable Þ
- 2 USB flash drives
- Documentation Þ

+ Optional:

- Stand-alone mounting bracket
- Single- or Dual-camera modules (RGB)
- YellowScan LiveStation: the real-time in-flight LiDAR monitoring kit (includes software & 2 radio-modems)

Dimensional drawings.





Max. data generated (3)	1 920 000 points/sec
Echoes per shot	Up to 3
Shots per second	Up to 640 000
Scanning frequency	Up to 20 Hz
RGB camera	Built-in 2MP global shutter
Weight	0.98 kg (2.2 lbs) batt. excl.
Size	L 153 x W 113 x H 117 mm
Autonomy	1.2 hour typ.
Power consumption	20 W
Operating temperature	-10 to +40 °C

(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 σ @ 50 m, nadir.

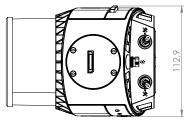
(4) Theoretical maximum of points with all shots yielding the maximum number of echoes. May vary depending on flight and survey conditions, and surveyed environment.

Software:

YellowScan CloudStation Essential & SBG Qinertia

Services:

- > 1-year warranty & unlimited technical support
- In-person or online training
- Boresight calibration certificate
- CloudStation Pro: refine and improve your data quality, with more export options
- Warranty and technical support extensions



(i) Dimensions expressed in millimeters