

NEW GENERATION

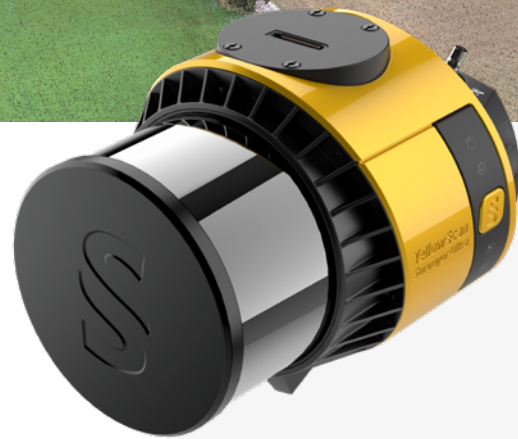
YellowScan Surveyor Ultra.

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 flexibility makes a great addition anywhere.

All specifications are preliminary and are subject to change without notice.



Technologies inside

 SBG SYSTEMS

 HESAI



Key differentiators

- ▶ 360° Surveying & Mapping
- ▶ Easy to use and process
- ▶ Safe operational range



Integrations

- ▶ Single rotor UAV
- ▶ Multirotor UAV
- ▶ VTOL UAV
- ▶ Fly & Drive

Technical specifications.

Scanner	Hesai XT32M2X
GNSS Inertial Solution	SBG Quanta Micro
Integrated Camera	Global Shutter 2MP (for Colorization purposes)
Laser Range @10% target reflectivity	80m
Recommended AGL	100m
Precision ⁽¹⁾⁽³⁾	3 cm
Accuracy ⁽²⁾⁽³⁾	2.5 cm
Echoes per Shot	Up to 3
Shots per Second	640k

Max. Data Generated ⁽⁴⁾	Single Return: 640 000 points/sec
	Dual Return: 1 280 000 points/sec
	Triple Return: 1 920 000 points/sec
Scanner FOV	360° x 40.3°
Weight	983 g (without batteries)
Size	L 153 x W 113 x H 117 mm
Power Range	12-25 Vdc
Max. Power Consumption	20 W alone, 36W with accessories

(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.

Package includes.

✓ Hardware:

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

✓ Software:

- ▶ YellowScan CloudStation & SBG QInertia

✓ Services:

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

⊕ 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)

- ▶ CloudStation optional modules:
Strip Adjustment / Terrain / Colorization
- ▶ Warranty and technical support extensions

Dimensional drawings.

ⓘ Dimensions expressed in millimeters

