



# YellowScan Explorer.

## Long-range, multi-platform 360° LiDAR solution

The YellowScan Explorer is equipped with a lightweight and powerful long-range laser scanner that can be mounted on various UAVs. It is also capable of surveying from manned aircraft, resulting in higher productivity.

This versatility allows users to tackle a wide range of projects with the proven ease-of-use of YellowScan's UAV LiDAR solutions.



### Technologies inside

 SBG SYSTEMS

 YellowScan



### Key differentiators

- ▶ 360° Surveying & Mapping
- ▶ Powerful & Lightweight
- ▶ Long operational range



### Integrations

- ▶ Single rotor UAV
- ▶ Multirotor & VTOL UAV
- ▶ Light Crewed Aircrafts
- ▶ Fly & Drive

# Technical specifications.

Laser scanner	YellowScan development
GNSS inertial solution	SBG Quanta Micro
Precision <sup>(1)</sup>	2 cm
Accuracy <sup>(2)</sup>	2 cm
Typ. flight speed	10 m/s
Typ. flying height	120 m
Max. rec. flying height	200 m
Point density	50 pts/sqm @ 100m AGL 10 m/s
Laser range	Up to 300 m
Laser wavelength	1556 nm
Scanner field-of-view	360°

Max. data generated <sup>(3)</sup>	2 500 000 points/sec
Echoes per shot	Up to 5
Shots per second	Up to 500 000
Scanning frequency	Up to 165 Hz (selectable)
RGB camera	Built-in 2MP global shutter
Weight	1.8 kg (4.0 lbs) batt. excl.
Size	L 270 x W 118 x H 135 mm
Autonomy	1 hour typ.
Power consumption	55 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) 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 Explorer
- ▶ 2 x 2 Batteries (*hotswappable*)
- ▶ Rugged pelicase
- ▶ UAV GNSS antenna and cable
- ▶ 2 USB flash drives
- ▶ Documentation

### ✓ Software:

- ▶ YellowScan CloudStation Essential & 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 Pro: refine and improve your data quality, with more export options
- ▶ Warranty and technical support extensions

## Dimensional drawings.

ⓘ Dimensions expressed in millimeters

