YellowScan CloudStation.

All-integrated software to handle your point clouds

CloudStation is the proprietary software developed by YellowScan to generate and visualize point clouds.

It comes as an all-integrated solution to allow a better and simplified experience for the customer.

Main features

▶ User-friendly graphical interface

▶ Automatic or custom strip selection

▶ Process and export in .LAS / .LAZ format

▶ Advanced visualization tools

▶ Project setttings: Coordinate System, LiDAR profile, angle range...

Software description.

YellowScan CloudStation provides a complete software solution to create and manipulate point cloud data. It allows to extract, process and display data immediately after flight acquisition.

The auto-generation of strips and the production of LAS files are now done in only few clicks.

To allow for remote work in the field, customers have the option to test out the license for up to 30 days.

The software is provided with support, maintenance and updates at no additional costs during the first year after purchase.

General characteristics.

CloudStation software:

TECHNICAL SPECIFICATIONS

- Operating on Windows 10
- Automatic updates
- Offline license mode
- Optional extra license seats

DISPLAY OPTIONS

- EDL filter
- Measurement tools
- Custom image export
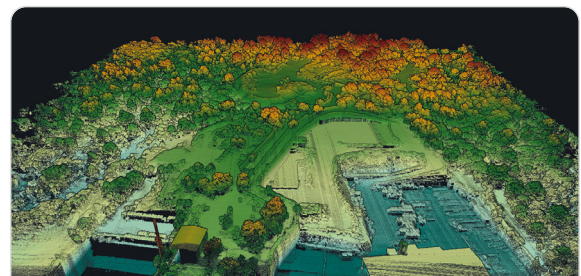- Cloud color: Elevation, Intensity, Echo...

Key features:

STRIP ADJUSTMENT

- Seamless adjustment of strips
- State of the art algorithms used in the offered adjustment methods
- Takes advantage of Ground Control Points (GCPs) for final adjustments
- One-click adjustment

YellowScan Vx20-100 point cloud

POINT CLOUD CLASSIFICATION

- Automatic classification of points as «ground/non-ground»
- Export classified LAS
- Export Digital Model from your classified point cloud as geolocalized TIFF
- Generate hillshade of your DTM

POINT CLOUD COLORIZATION

- Export colorized point clouds from simultaneous LiDAR + camera acquisition
- Export colorized point clouds from orthophoto
- Colorize and visualize your strips in only few clicks
- Automatic LiDAR - camera calibration refinement

CloudStation plans.

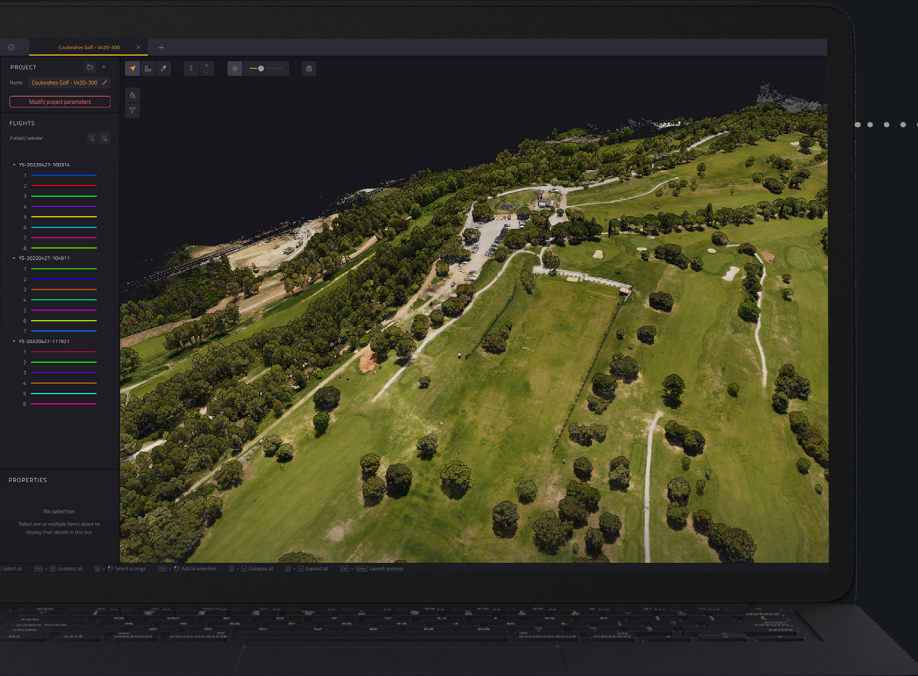| CloudStation Essential	CloudStation Pro
CloudStation Essential Visualize, inspect, and export your data with standard features.	**CloudStation Pro** Refine and improve your data quality with advanced features and more export options.

FEATURES COMPARISON	ESSENTIAL	PRO
▶ **Data Management**		
Open trajectories for display and quality inspection	✅	✅
Georeference raw YellowScan data	✅	✅
Project catalog for easy retrieval	✅	✅
▶ **Visualization / Display**		
Smooth 3D point cloud visualization	✅	✅
EDL filter for easy-to-read point cloud display	✅	✅
Camera mode (iso/perspective)	✅	✅
▶ **Data Inspection**		
Measuring distances in any projection	✅	✅
Slices: two-click data inspection and scrolling through point cloud	✅	✅
▶ **Classification**		
Simple & fast ground / non-ground classification	✅	✅
▶ **Trajectory Refinement**		
Strips timestamps management (auto + manual)	✅	✅
POSPac & Qinertia integration: easy SBET generation	✅	✅
▶ **Data Processing**		
Remove outliers	✅	✅
Colorization from orthophotos	✅	✅
Colorization from images		✅
Robust strip adjustment algorithm		✅
Precise (time-dependent) strip adjustment algorithm		✅
Utilize GCPs during strip adjustment to constrain accuracy		✅
▶ **Export**		
LAS 1.2 / LAS 1.4 / LAZ 1.2 / LAZ 1.4 / TXT	✅	✅
Trajectory (TXT)	✅	✅
Strip adjustment report (accuracy, precision, mismatch..)		✅
DTM, DSM and hillshade generation		✅

Typical pointcloud snapshots.

YellowScan Vx20 series

- ▶ Flight height: 50 m AGL
- ▶ Speed: 5 m/s
- ▶ Processing: Colorized

YellowScan Voyager

- ▶ Flight height: 180 m AGL
- ▶ Speed: 31 m/s
- ▶ Processing: Strip Adjusted