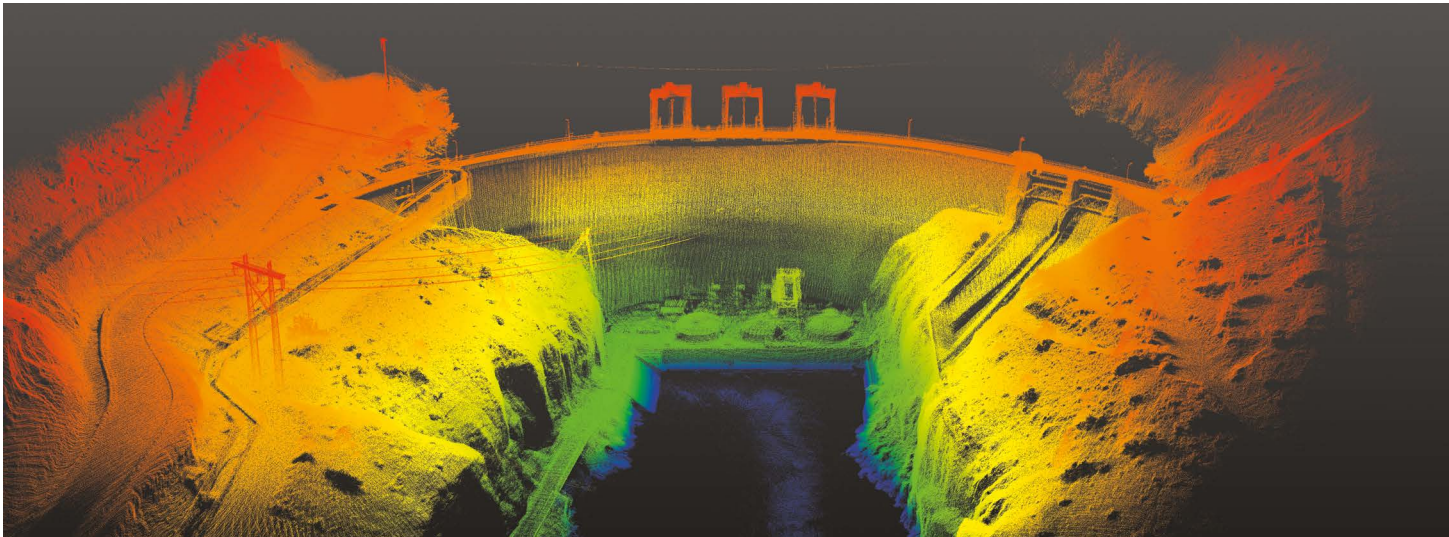


The turnkey UAV LiDAR solution



The customer problem

80% of business information has a spatial component which will have been surveyed or mapped. There is huge global appetite for 3D mapping and visualization **HOWEVER** conventional methods of 3D data collection can be expensive, time consuming and difficult to undertake.

Beyond the point...

At Routescene we're always looking beyond the point... to help customers solve real problems.

The Routescene® solution

- ✓ **Complete turnkey mapping system**
Our survey-grade 3D LiDAR mapping solution is an integrated system ready for immediate use.
- ✓ **World leading solution**
Proven. Reliable. Provides fast results. The most competitively priced solution giving a strong Return on Investment.
- ✓ **Solves specific industry problems**
Industry specific tools to simplify and reduce the time you spend post-processing LiDAR data.
- ✓ **Workflow and productivity**
It is our combination of workflow methodologies, software, hardware and firmware that makes our solution unique.
- ✓ **Credibility**
We are continuously developing and improving this technology based on 30 years of experience in surveying, including; LiDAR, GIS, dynamic data capture and data management.



Lightweight and compact system designed specifically for use on drones (Unmanned Aerial Vehicles or UAVs).



Transforming surveying worldwide

What is included in the Routescene® solution?

We understand the problems you need to solve and have combined survey experience with intelligent thinking to design a reliable and practical solution. And we've made it simple. All the complex integration is complete. The result – an immediately operational, robustly engineered, survey-grade turnkey solution combining workflow methodologies, software, hardware and firmware.

The hardware

LidarPod®

An integrated 3D mapping tool containing a survey grade LiDAR sensor, RTK GNSS\INS, data storage, radio telemetry

Ground station

With GNSS antenna, radio antenna and tripod

UAV mounting kit

For easy integration on any rotary UAV

Pelican cases

To protect the equipment during transportation

Vehicle mounting kit upgrade

To maximize the use of your equipment



“Out of the box” system
so you are immediately operational.

A closer look at the LidarPod®

- Uses proven LiDAR technology (Light Detection and Ranging)
- The most robust UAV LiDAR system on the market
- Aerodynamic carbon fiber protective shell
- 12 hour data storage enabling a full day in the field
- Can be fitted onto any mobile platform – drone, vehicle, boat, manned helicopter



Payload and drones

Payload is directly correlated to the size of drone (UAV) required and its flying time. The lightweight LidarPod has an overall payload of 3kg including the weight of the UAV mounting kit, cables and GNSS antennae. Suitable for many multicopter drones on the market the light weight enables a longer flying time.

Product conformity

The product is non-ITAR (International Traffic in Arms Regulations) rated so it is not subjected to export controls. The LidarPod has been independently CE and FCC certified to ensure it is compliant to electrical and radio transmission standards.



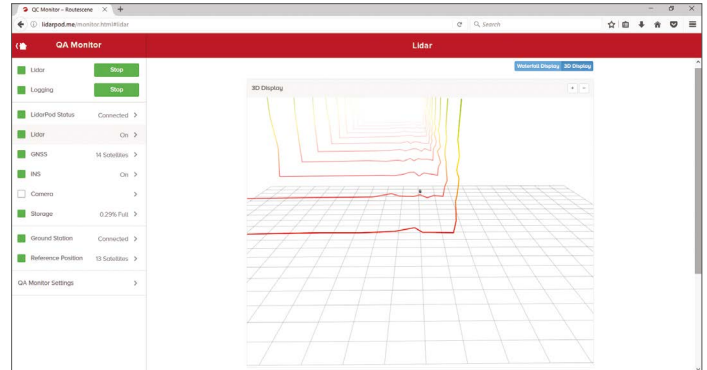
The software

All our software has been specifically developed with survey, LiDAR and GIS data analysis in mind.

Real-time quality assurance with QA Monitor

For immediate and continuous real-time in-flight data monitoring, to make sure you leave the survey site with the data you need. This web based app gives you confidence in the data you are collecting while you are collecting it.

- Simple and easy to use
- Accessed via a Wifi access point on the Ground Station
- Full control of LiDAR and Data logging
- Use throughout the duration of your survey
- Provides real-time status and quality assurance for:
 - LidarPod GNSS / INS
 - LidarPod LiDAR sensor
 - RTK Ground Station



Check for green lights, if all the LED are Green you are good to go!

Beyond the point...LidarViewer® Pro

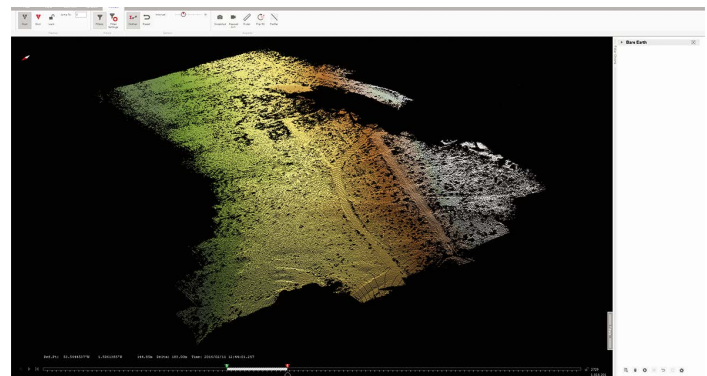
– turn your raw data into business information

- Visualize LidarPod data
- Quality assurance of LidarPod data
- Post processing of LidarPod data

The LidarPod delivers a fantastic richness of raw LiDAR data with superb detail. GIS and CAD packages are unable to cope with LiDAR data due to the large volumes of data collected. We have the solution - with LidarViewer Pro you can process and instantly view your data and make sense of it all.

LidarViewer Pro is a framework on which to build a LiDAR processing workflow including detailed analysis and export. This flexible application offers powerful filters and filter chains to decimate, analyze and convert huge volumes of point cloud data to improve workflow and productivity. You can export in a variety of formats and coordinate systems including as standard delimited ASCII, LAS, LAZ.

With the Filter Development Toolkit you can develop your own filters for data cleaning, data reduction, data conversion and interfacing to third party software. These filters enable you to create repeatable workflows and extract only the relevant data for use in external software.



NEW! Routescene LidarViewer® Bare Earth tool

– new automated tool for quick and easy DTMs

In one step with our automated process you can quickly and cost-effectively remove all non-ground points and reveal the ground surface.

- Ease of use and increased productivity
- Radically reduces the number of software packages and steps in the process
- Reduces the time you spend post-processing LiDAR data

TRAINING FOR OPTIMAL RESULTS

Training for your operators is essential so you know how to get optimal results from your hardware and software. This way you achieve a quicker return on your investment. Book your training when you purchase a Routescene solution.

Technical support for the first year is included when you purchase training.

Request your quote for the Routescene turnkey system today. Contact sales@routescene.com

www.routescene.com

The Routescene Advantage - unique workflow

Our workflow is a set of orchestrated and repeatable procedures and processes, so you undertake surveys and data analysis in a systematic, streamlined way. We've included automation to reduce errors and provide full documentation as part of your set up training.

FEATURES

- integrated end-to-end solution
- carefully thought through practical workflow

BENEFITS

- ease of use
- immediately operational

OUTCOME

INCREASED
PRODUCTIVITY

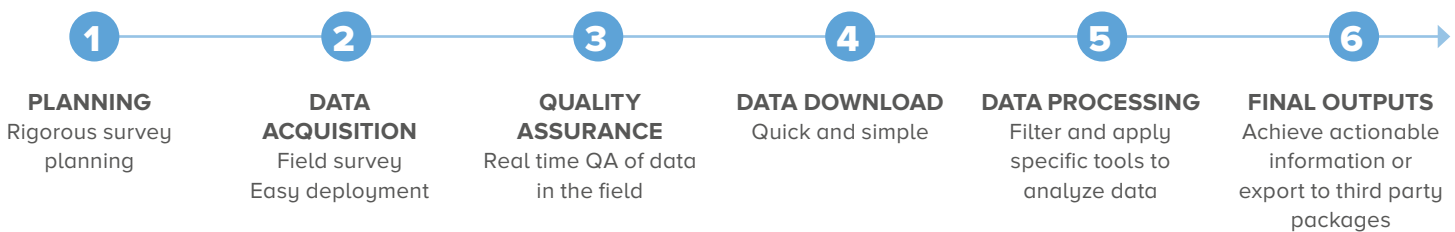
Designed by surveyors

Our system design and workflow is based on 30 years of in-depth survey experience and we understand how the system will be used in practice. The Routescene workflow will increase your rate of return.

Routescene® workflow across the turnkey system

Our workflow spans the entire utilization of the solution:

Brings efficiency
Effective management
Improves productivity
Reduce costs

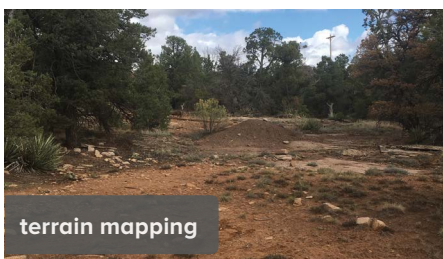
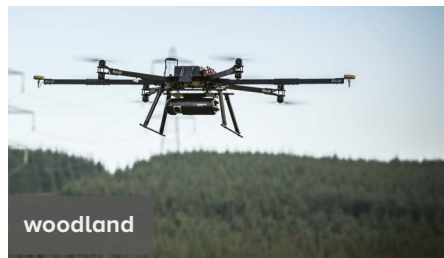


Capability and applications

Designed to survey sites where accurate mapping is essential but difficult to achieve:

- Hard to reach, hazardous or hostile environments where access is dangerous
- Densely vegetated sites
- Sites with inaccessible steep slopes

The Routescene® solution brings efficiency, effective management and a high rate of return or cost saving. UAV mounted, the solution is perfectly suited for terrain mapping, vegetation management, mining applications and surveys in wooded and forested sites.



Want to know more?

Request our case studies and datasets.
Contact sales@routescene.com

Routescene Inc, 200 Troon Trail, Durango, CO 81301, USA

Part of the Mapix technologies Group of companies

T +1-303-915-5528 E sales@routescene.com • www.routescene.com

