

Customer Focus + Workflow + Software + Planning + Aerial Hardware +  
Direct Georeferencing + LiDAR + Post Processing =

## Customer Satisfaction

We've built upon a simple philosophy over 13 years—work to understand what professionals are trying to accomplish, and build the system they need.

In earlier days, the job was to engineer the most durable and resilient drones. (The early adopters would “figure the rest out.”) To succeed, Microdrones had to expand upon its legacy of crafting the best drones.

Today, the market is won by packaging:

- the best purpose-built sensors according to market need
- durable, resilient, stable aircraft
- intuitive workflows and software that facilitates planning and decision making
- the most diligent people to develop and support the technology

Microdrones has done this best for surveying, construction, utilities, and mining, where we concentrate our efforts today. (Our sales people

like it when a geospatial prospect has toyed with a video drone for professional surveying. They already know what they lack; when they see what we can do, they want to become a customer.)



Vivien Heriard-Dubreuil  
President

Geospatial pros demand a faster, more effective way to capture elevation data with extreme accuracy. Extraction of terrain data from imagery is highly effective—until you confront vegetation.

### IT'S NO LIE - THE PROMISE OF LIDAR

The ability to penetrate foliage makes LiDAR the most versatile tool for elevation mapping, and LiDAR technology is flooding the market. Call this “drone industry round 3.”

Drone contenders must establish commercialized, integrated LiDAR solutions. The winner will dominate the “drone industry” and more importantly command respect in the much more important geospatial industry. A handful will emerge when the dust settles on 2018.



### NOW MORE THAN EVER, DG IS KEY

Over the past year, we saw laser sensors, airframes and software released, but the end user was expected to perform the integration. Is that helpful?

We applied our R&D to an end-to-end drone-based LiDAR mapping package. From prior success with the mdMapper1000DG, we acknowledged DG (Direct Georeferencing) for capturing LiDAR elevation points for professional mapping.

DG delivers accuracy superior to traditional aerial triangulation, RTK and PPK. Projects are faster and less expensive because you don't have to survey ground control points.

Direct georeferencing is the highly precise measurement of 3D coordinates, (including the orientation angle of the sensor in the air) so data can be accurately connected to points on the ground.

DG technology will be the heart of the new



mdMapper LiDAR packages. It records sensor location and attitude data 200 times per second, which means even the slightest movement of the drone in the x, y or z is factored.

### ONE SIZE DOES NOT FIT ALL

Microdrones realized that a “one size fits all” LiDAR package is not realistic for a diverse global market. The team saw patterns in its field conversations:

- What accuracy do you need?
- What point cloud density?
- What kind of training will you need?
- What's your current workflow?
- What volume of land are you mapping?
- What's your payback period?

We uncovered a segmented need, and we'll offer a segmented approach. There is no “elastic waistband” for aerial LiDAR.

That's why we're developing an entire family of aerial LiDAR—four purpose-built packages to meet accuracy, flexibility and budgets of our Trimble community.

People ask me if I'm nervous about competitors who have “beaten us” to release LiDAR products. I remind them of our success with those who failed first to do surveying with video drones.

We're right where we want to be right now, prepared to fulfill the market after they have tinkered with the guinea pig products. We've been here since 2005, and although technology evolves at an insane pace, our customer-focused business fundamentals are time tested.



Email: [info@microdrones.com](mailto:info@microdrones.com)  
Sells Worldwide, with offices in:  
Rome, NY (USA)  
Siegen (Germany)  
Vaudreuil-Dorion, QC (Canada)  
Number of Employees:  
80 and growing

“We were very excited to learn that Trimble partnered with Microdrones... we are thrilled about the possibilities and the laser options. Everything was so easy and technically developed... it's a great working tool.”

WOLFGANG PROBST  
CEO and Sales Director  
AllTerra Deutschland GmbH



## WORK SMARTER WITH ALLTERRA DEUTSCHLAND GMBH AND MICRODRONES®

AllTerra Deutschland GmbH is proud to offer complete UAV mapping packages from Microdrones that include everything geospatial pros need for surveying, mapping, and inspection, and now – methane gas detection. (Microdrones recently launched a methane gas detection package for infrastructure and landfill inspections.)

AllTerra Deutschland GmbH sought the perfect fit for the market and found exactly that in Microdrones' packaged systems. Eager to help professionals in Bavaria, Baden-Wurttemberg, Hesse, and Rhineland-Palatinate, as well as in Austria, the AllTerra Deutschland GmbH team has the tools and training to help professionals get results with aerial surveying.

To get in touch with the Microdrones expert nearest you, complete this form: [www.microdrones.com/xyht](http://www.microdrones.com/xyht)



### NO GROUND CONTROL POINTS,\* LESS SIDELAP, MORE PRODUCTIVITY.

Ask about the mdMapper1000DG. It's equipped with a Trimble APX-15 module featuring a survey-grade GNSS receiver and a precisely calibrated IMU from Applanix, built specifically for Direct Georeferencing (DG). It can even tackle corridor mapping!

\* Planning mapping missions is always situation dependent. The decision to use or omit GCPs/Check Points is driven by the specific situation or project. mdMapper1000DG users will enjoy the option of excluding GCPs on more projects.

