



Micro 120 is the latest high-performance UAV LiDAR system, released in the beginning of 2022. With its maximum laser pulse rate of 1800kHz, this 3.5kg lightweight LiDAR system offers high point density even on VTOL platforms with fast flying speed. Fully integrated with a survey grade IMU/GNSS and a high-resolution calibrated camera, Micro 120 is ready off the shelf for mounting on your UAV.

Its small body, elegant design, high accuracy, and ease of use, the advantages of Micro 120 are more than just the typical parameters. With Geo-LAS software to automatically generate RGB laser points and 3D models, Micro 120 provides an accurate and efficient solution to many applications.

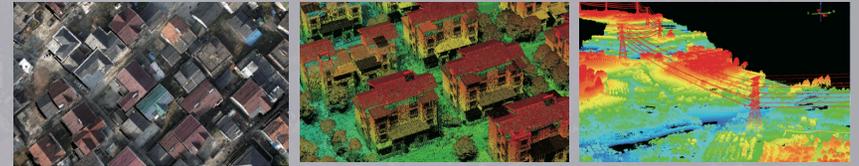
Like other LiDAR models in the LidarSwiss product series, Micro 120 supports Geo-RT to create real-time colorized point clouds that can be downlinked to ground station during flight - an ideal technology for quick response application.

Features:

- 20° forward and backward view increases point density of vertical objects in flightline direction
- Intelligent system controller
- Automatic RGB attribution to laser points
- Only 30% side lap needed to generate survey grade DOM
- Lifetime system calibration
- Direct geo-referencing technology
- Large data storage space
- Easy to install and operate

Typical Applications:

- Large area mapping:
 - Land mapping
 - Forestry mapping
 - Flood plain mapping
 - City modeling
- Long corridor mapping:
 - Oil and gas pipelines
 - Long distance power transmission lines inspection
 - Highway
 - Railroads
 - Coastal lines



Item:

- Laser class
- Wave length
- Laser beam divergence angle
- Scanning range
- Scanning angle
- Pulse rate
- Point density
- Scanning mechanism
- Scanning rate
- Pitch/Roll accuracy
- Heading accuracy
- Recording media
- Storage capacity
- Single scanning swath
- Image dimension
- Effective operating range
- Voltage
- Power consumption
- Dimensions (LxWxH)
- Weight
- Working temperature
- Storage temperature

Specification:

Class 1, eye safe
Near infrared
0.4 mrad
1430m @ 80% reflective
100°
1800kHz
Up to 500pts/m²
Rotating polygonal mirror
50 to 400Hz
0.006° (post processed)
0.019° (post processed)
Solid State Disk (SSD)
2TB
Up to 1000m
42mp with 24mm lens
730m
14-30V DC
80W (max.)
322mm x 117mm x 158mm
3.5kg
-10°C to 40°C
-20°C to 50°C

