

VoxelAero Mapper

VoxelAero Mapper is a handheld 3D laser measurement system primarily designed for mining users. It integrates advanced multi-line LiDAR and high-precision inertial measurement units, and adopts industrial-grade laser SLAM algorithms. It supports real-time and post-processing mode calculations, operates in GNSS denied environments and performs high-precision 3D scanning in large-scale scenarios. Additionally, VoxelAero Mapper can be mounted on DJI M300/350 drones, providing active obstacle avoidance during flight to safely capture terrain data in enclosed spaces. VoxelAero Mapper is dedicated to provide mining users with real-time, simple, flexible, high-accurate, and professional 3D scanning solutions.



Real-time



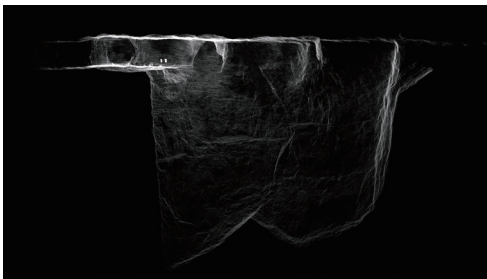
Flexible



Professional



High Accuracy



Weight: 1.8kg(excluding battery)

Dimension: 280×75×11mm (mainbody)

Solution Mode: Supports both real-time and post-processing solutions

Operating Duration: 1.5h (handheld mode)

Scanning Field of View: Horizontal 330°, Vertical 360°

Positioning Method: SLAM technology (no need for GNSS)

Data Processing: Supports both real-time processing and post-processing

Scan Control: Supports both software and hardware control

Laser Class: Class 1 (safe for human eyes)

Power Input: 24V DC

Ranging Capability: 0-100m

Absolute accuracy : < 5 cm

Data Interface: USB3.0

Internal Storage: 256G SSD

Communication Method: WIFI

Operating Temperature: -15 ~ 45°C

Product Power Consumption: <35W

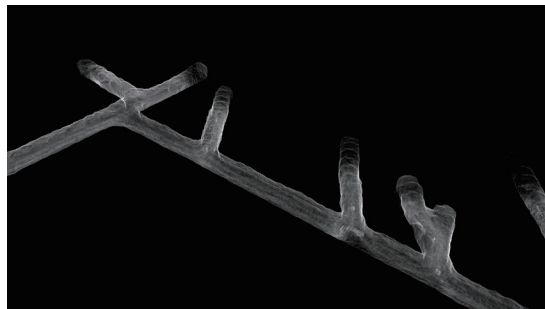


VoxelAero Mapper

Applications

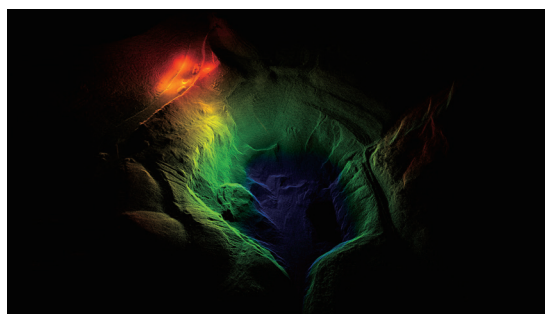
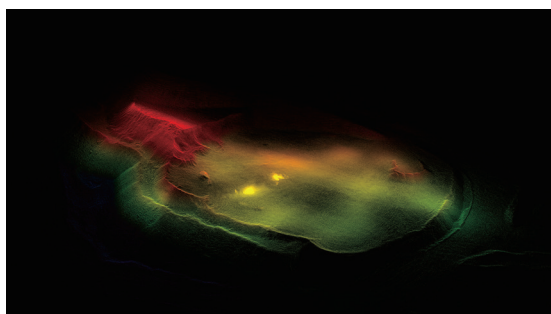
Underground Tunnel

In underground tunnels applications, VoxelAero Mapper rapidly creates high-precision 3D point cloud models, to enable real-time positioning and extraction of tunnel cross-sections and plans, to improve the mine safety and production efficiency.



Open-Pit mine

In open-pit mine applications, VoxelAero Mapper efficiently captures topographical data and rapidly generates 3D models to support mine planning, monitoring, and safety assessments.



Stockpile Inventory Management

In stockpile inventory management, VoxelAero Mapper quickly captures 3D data of material piles, enabling accurate volume calculation and inventory management.

