

SENSOR CAPABILITIES

Supply Line Survey

LIDAR + EO/IR



SCHIEBEL
CAMCOPTER® S-100

FACTSHEET

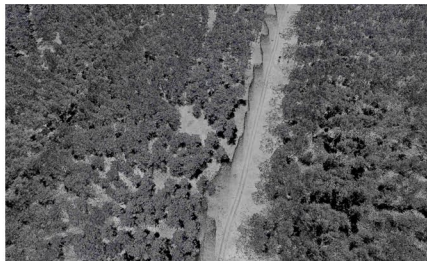
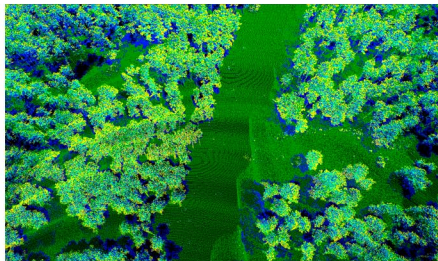
Supply Line Survey

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Conventional power line survey has been conducted by ground-based teams, however, helicopters have taken over much of this work due to their improved efficiency as well as the ability of companies to reduce disruption by keeping the infrastructure live during the inspection. Other advantages include the improvement in health and safety by minimizing the requirement to work at height, the exposure to live circuits and the number of site visits. Inspection costs can be dramatically reduced by faster inspection times and fewer setup costs. Live inspection avoids the opportunity cost of shutting down. Pre-maintenance inspection ensures optimal resource allocation.

Laser Imaging Detection and Ranging (LIDAR)

Vegetation encroachment near power lines represents a considerable fire risk and ultimately disruption to the network. Companies have a key role in managing the area around power line infrastructure to ensure that these risks are minimized. Airborne LIDAR is a proven effective method for collecting data from which appropriate information regarding the proximity of vegetation can be extracted and used to manage the encroachment.



- Fully integrated system for combined terrestrial and hydrographical airborne laser scanning
- High-resolution 3D mapping and terrain modelling
- High laser-repetition rates up to 280 kHz
- Real-time control and scan data visualization

The **Electro-Optical/Infrared (EO/IR)** gimbal combines a color video camera for operator orientation as well as the following sensors:

Ultra-violet (UV) corona discharge sensitive camera

- Detection of coronal discharges even during full daylight
- Three fields of view lens (16°/8°/4°)
- UV imagery blended and presented with conventional video
- Sensitivity, $3 \times 10^{-18} \text{ W/cm}^2$ and fully solar-blind



Thermographic IR camera

- Precise temperature measurement
- Identification of powerline hot spots
- 0,03°C sensitivity and $\pm 1^\circ\text{C}$ accuracy

High-definition still camera

- Fault recording and reporting
- Identification of vegetation encroachment