an Osmose company

Logsys Power Services

OsmoVision®

LiDAR and Image Recognition Solution

Logsys Power Services provides professional pole engineering services designed to maximize the safety and reliability of your pole plant while reducing cost of ownership.

OsmoVision® is an industry-leading technology solution designed to effectively transform LiDAR point clouds into actionable data to improve the integrity and reliability of your distribution network and to improve the application for attachment process for telecommunication providers.

OsmoVision consists of proprietary data processing tool sets that result in highly accurate models of your poles and attachments, streamlining your time-sensitive workflows for permit application review, pole loading, and clearance analysis projects.

LiDAR Classification

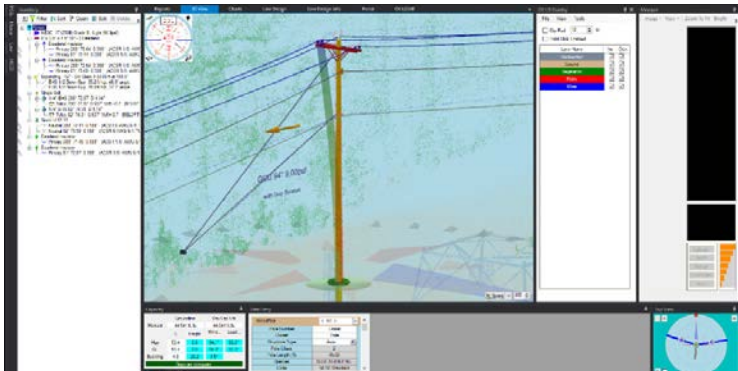
Fast, accurate point cloud classification and segmentation leveraging Logsys's utility experience and knowledge to create a *more accurate model* of your pole.

Pole Location Indexing

Combination of LiDAR point cloud and GPS locations to accurately position structures to improve asset locations in GIS.

Image Recognition

State-of-the-art neural networks trained to identify utility poles, wires, and equipment for *faster* pole model creation.



Improved Measurements

Attachment heights, span lengths, and line angles are now determined systematically from the LiDAR point cloud, ensuring improved accuracy for pole loading and clearance analysis.

Lower Cost Model Creation

Digital modeling of the pole and attachments created by combining LiDAR and image recognition data to *improve accuracy and perform faster at lower cost.*

OsmoVision is compatible with all LiDAR acquisition sources.

Step 1: Data Acquisition

OsmoVision solves deployment issues associated with traditional LiDAR acquisition methods including pole access and mobilization, ensuring Logsys can serve projects of any size and location. This turnkey mobile solution ensures the technician can collect the increased detail needed to create better models and solve more problems for pole owners and telecommunication providers.

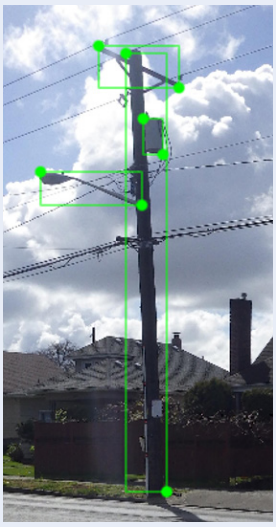
Improve Data Accuracy with OsmoVision

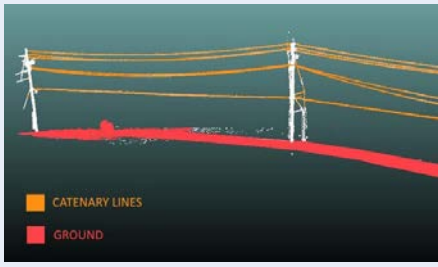
OsmoVision collection incorporates vehicle or backpack LiDAR collection with imagery capture. Eliminating the need to collect physical measurements in the field like angles, span lengths, and heights reduces the chance for human error and inconsistencies in pole attribute data. Our ability to reach difficult access locations (vegetation, rear lots, etc.) makes our approach a perfect complement to pole owners with existing LiDAR solutions.

Step 2: LiDAR Classification • Image Recognition

OsmoVision utilizes point cloud classification and segmentation along with image recognition to create a more accurate digital twin of the pole, wires, and equipment.

Pole locations, span lengths, and wire angles are extracted from the digital twin without the need for physical measurements in the field. This is accomplished through our propriety pole location indexing process to match ground truth to each pole model.



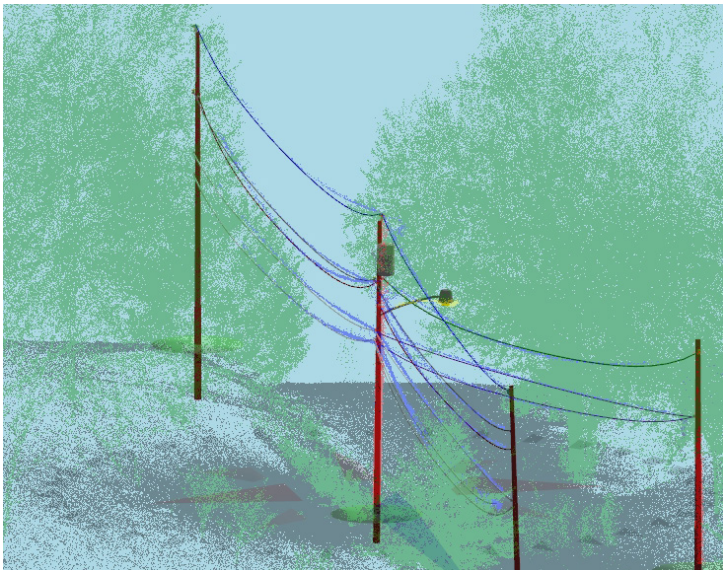


Step 3: Clearance Analysis • Pole Loading

OsmoVision leverages tools within the O-Calc® Pro pole loading software to adjust attachment heights, span lengths, and line angles to match the LiDAR point cloud. Design technicians perform entire line clearance analysis, not just at the pole, but along the entire span.

Accuracy, consistency, and efficiency of pole loading reports, make-ready engineering designs, and application maps are significantly improved through OsmoVision's turnkey data acquisition and analysis tools.

Pole owners and telecommunication providers can leverage the OsmoVision point cloud to aid in other strategic initiatives.



To contact your local Logsys Power Services professional, call (08) 9300 2950, or email enquiries@logsys.com.au.