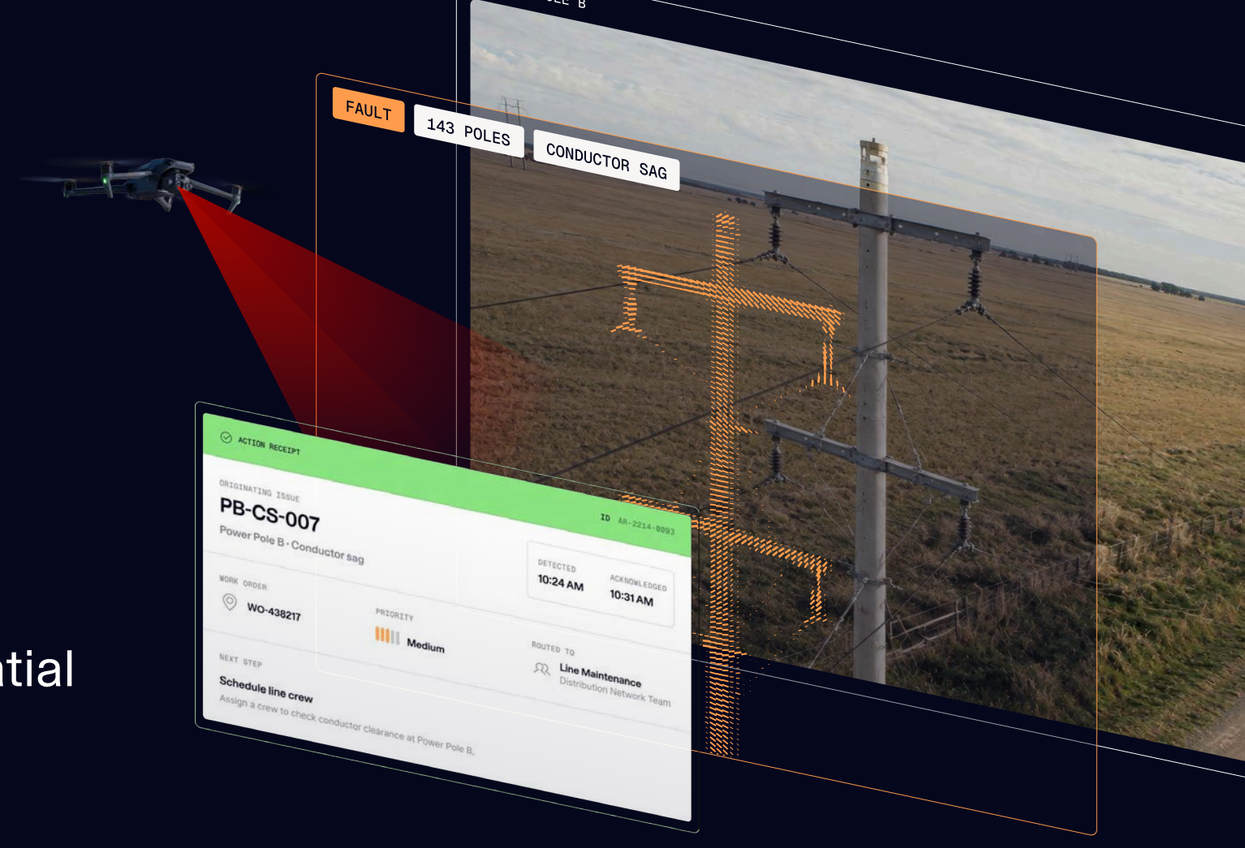
UNLEASH | ORB

Same field crew. More network inspected.

Orb combines automated inspection missions, standardized capture, computer vision, and geospatial data into one inspection program.



Ausgrid · FPL · Endeavour Energy · Essential Energy · Powercor AUSTRALIA · Neurosight Robotics — Precision Beyond Human Reach

Aging networks, limited insights

Utilities manage vast, aging networks where inspection quality affects reliability, compliance, and public safety. Regulatory pressure and cost constraints mean inspection has to scale without adding field headcount.

FIELD RESULT

"Using Unleash Live with DJI drones has tripled our defect detection, cut costs, and reduced emissions by 80 percent. The automation and image quality give us faster, safer, and more accurate insights to keep the power on for our communities and clients."

Steve Lette
Head of Digital and Insights
Endeavour Energy

Complete asset inspection workflow

Orb covers the complete asset inspection workflow, from planning to action, so a utility can start on one asset class and add stages as its program matures.

Plan

Mission planning built from existing GIS and asset data, with inspection profiles set per asset type.

Capture

Autofly flies repeatable paths for consistent imagery, piloted in the field or unattended from AutoDock.

Analyze

Computer vision detects and classifies component-level faults across every capture, on cloud or edge.

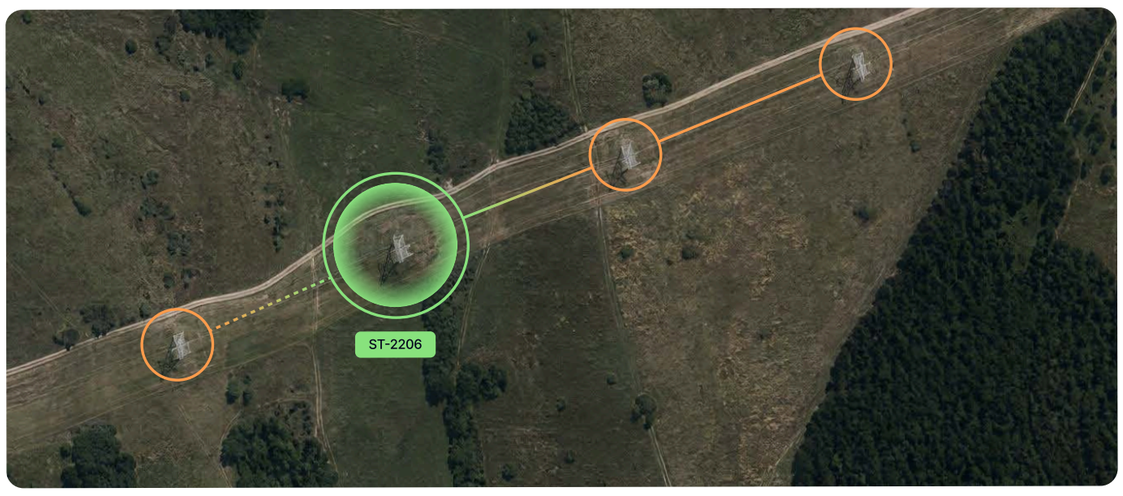
Review

Reviewers confirm, correct, or reclassify each flagged detection, viewed in context against geospatial data.

Act

Results and alerts route into EAM, ADMS, ERP, and GIS for work order creation.

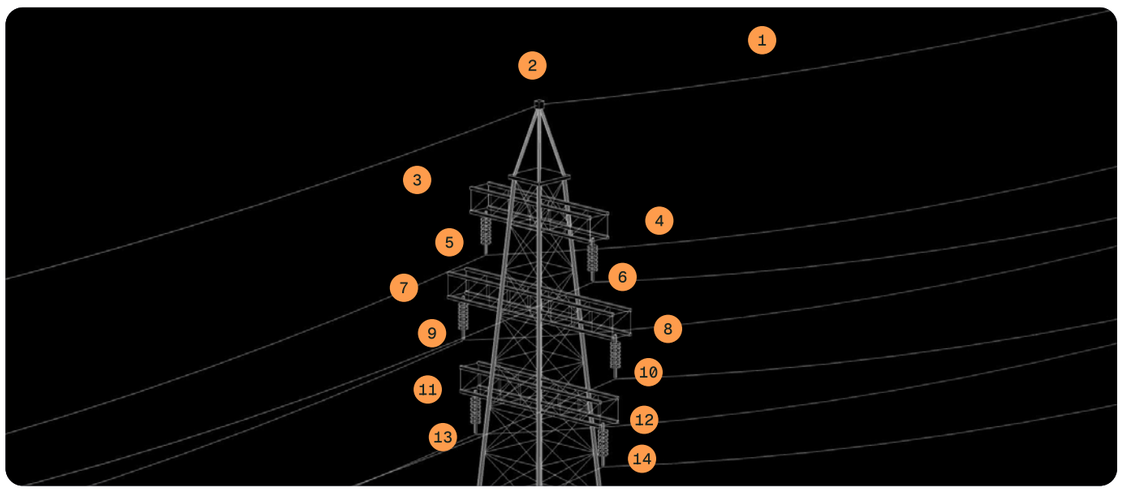
PLAN



Mission planning and work allocation

Asset-aware mission planning uses existing GIS and asset data to build inspection profiles and coordinate field teams, with in-progress tracking and verification built in.

CAPTURE



Inspection and image capture

Capture profiles set altitude, speed, overlap, and camera type per asset, so imagery stays consistent across pilots and cycles. Imagery and metadata ingest securely against the asset. On AutoDock sites, an operator flies the same missions from a browser.

Continuously trained on your network.

Distribution pole condition models are trained on global assets and on your own field imagery, then retrained against reviewer corrections each cycle.

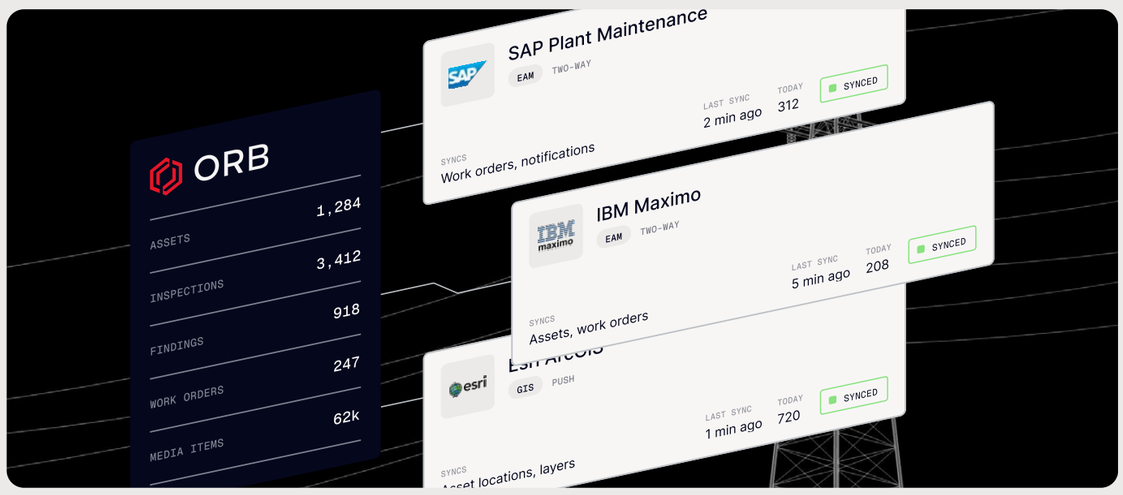
ANALYZE



Asset condition assessment

Models detect and classify multiple component faults, with human-in-the-loop review and rapid retraining that leverages every reviewed image.

REVIEW AND ACT



Actionable insights into existing systems

Configurable dashboards and reports integrate with SAP PM, IBM Maximo, ArcGIS, EAM, ADMS, and GIS systems via API, supporting maintenance prioritization and work order creation.

What changes across a full cycle

Faster and more accurate inspection across the network, with fewer repeat visits and earlier identification of critical faults.

DETECTION ACCURACY

91%

F1-Score for precision and recall

DEFECT IDENTIFICATION

300%

Increase in the first year, versus helicopter inspection

CRITICAL FAULTS

< 24HRS

Overnight identification for prioritized remediation

INSPECTION CYCLE TIME

40-60%

Reduction compared to manual methods

REPEAT SITE VISITS

10-15%

Fewer truck rolls from more consistent capture

FIELD TEAM EFFICIENCY

25-40%

Program expansion without additional crews

Start on one asset class, scale to the network

Deployment follows a structured path from in-field validation through to enterprise-wide rollout, integrating with the workflows and systems already in place.

IN-FIELD

Validate automated inspection in your own environment, hands-on and practical.

IMAGE ANALYSIS

Test and optimize the model on your imagery through SME validation and retraining.

DEPLOY

Full access to automated, data-driven inspection with drone automation and integrated reporting.

EXPAND

Scale organization-wide with SSO, role management, custom AI models, APIs, and AutoDock.

ISO 27001 CERTIFIED