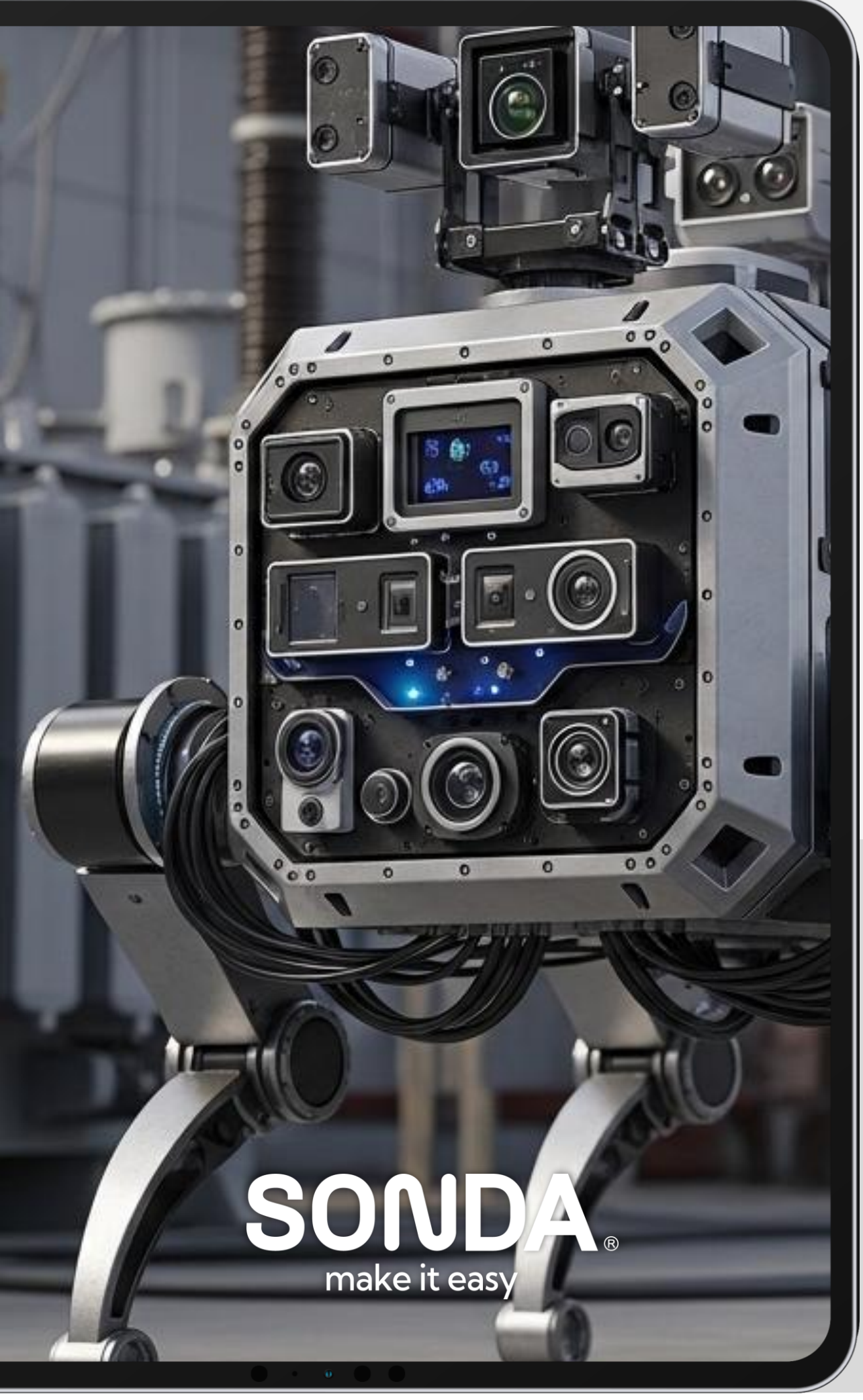

CASE STUDY

Utilities

Autonomous Inspection and Intelligent Monitoring Solution for Electrical Substations

Implemented in Chile

Challenge:

Perform frequent inspections in critical and high-risk environments by reducing reliance on manual activities, enabling early detection of operational deviations, lowering the time and cost of on-site inspections, and increasing personnel safety in electrical areas.

Solution:

- Implemented autonomous robotics for daily inspections in electrical substations, without direct human intervention.
- Enabled continuous monitoring of operational measurements for automatic deviation detection.
- Generated alerts and service tickets for investigation and remote action when applicable.
- Integrated information into a centralized monitoring dashboard.

Benefits:

Automation of substation inspections, increasing operational efficiency and reducing reliance on manual activities.

Significant reduction in time, costs, and resources associated with on-site inspections.

Enhanced operational safety, minimizing personnel exposure to critical and high-risk electrical environments.

Real-time visibility and control, with data, KPIs, and alerts integrated into a centralized dashboard, enabling scalable, reliable, and data-driven operations.

Tags: *Utilities; Energy; Autonomous Robotics; Remote Inspection; Intelligent Monitoring; Electrical Substations; Operational Automation; Operational Safety; IoT.*