

**ADVANCED SOLUTION FOR
SOLAR POWER PLANTS
INSPECTION**

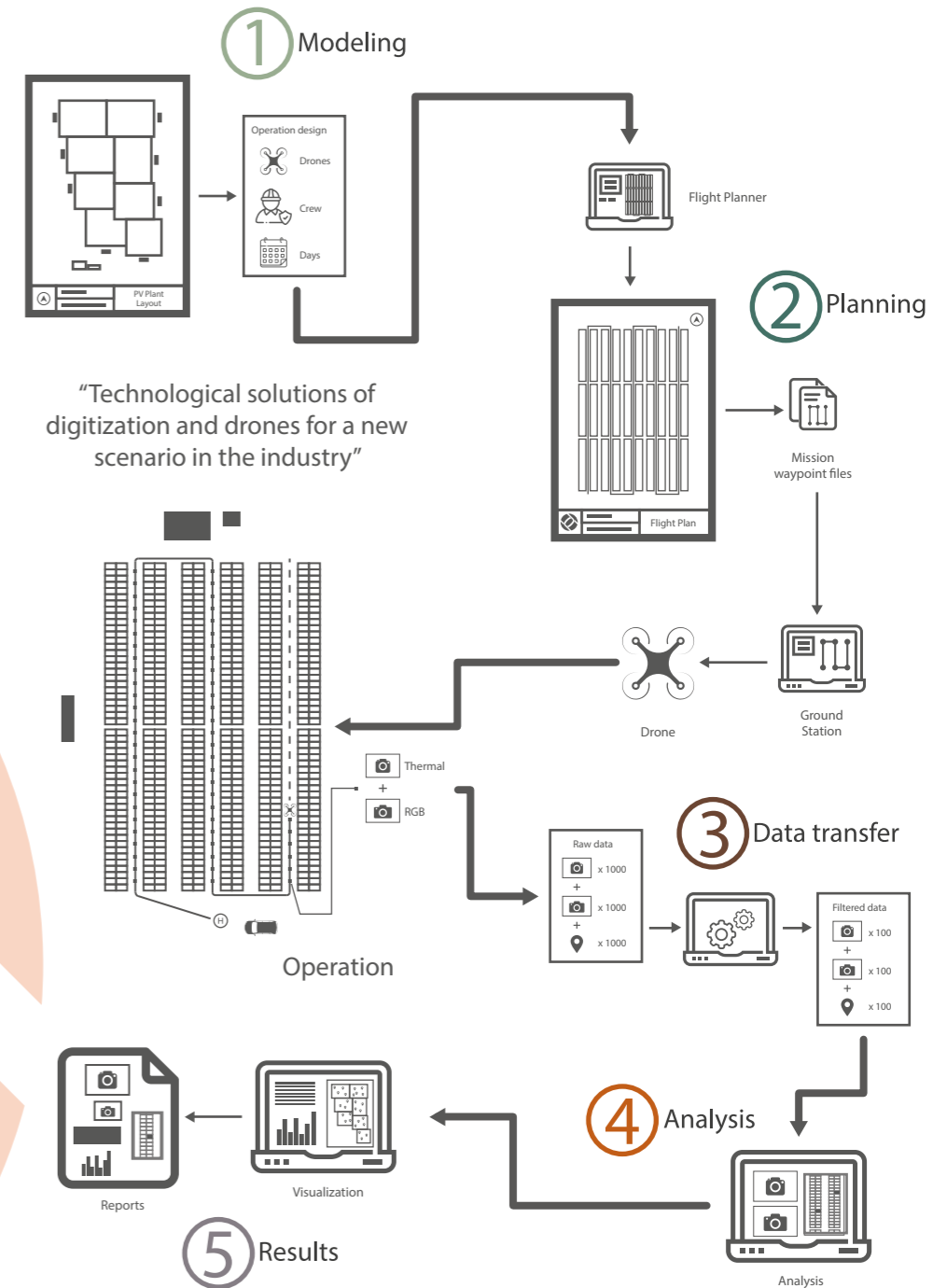
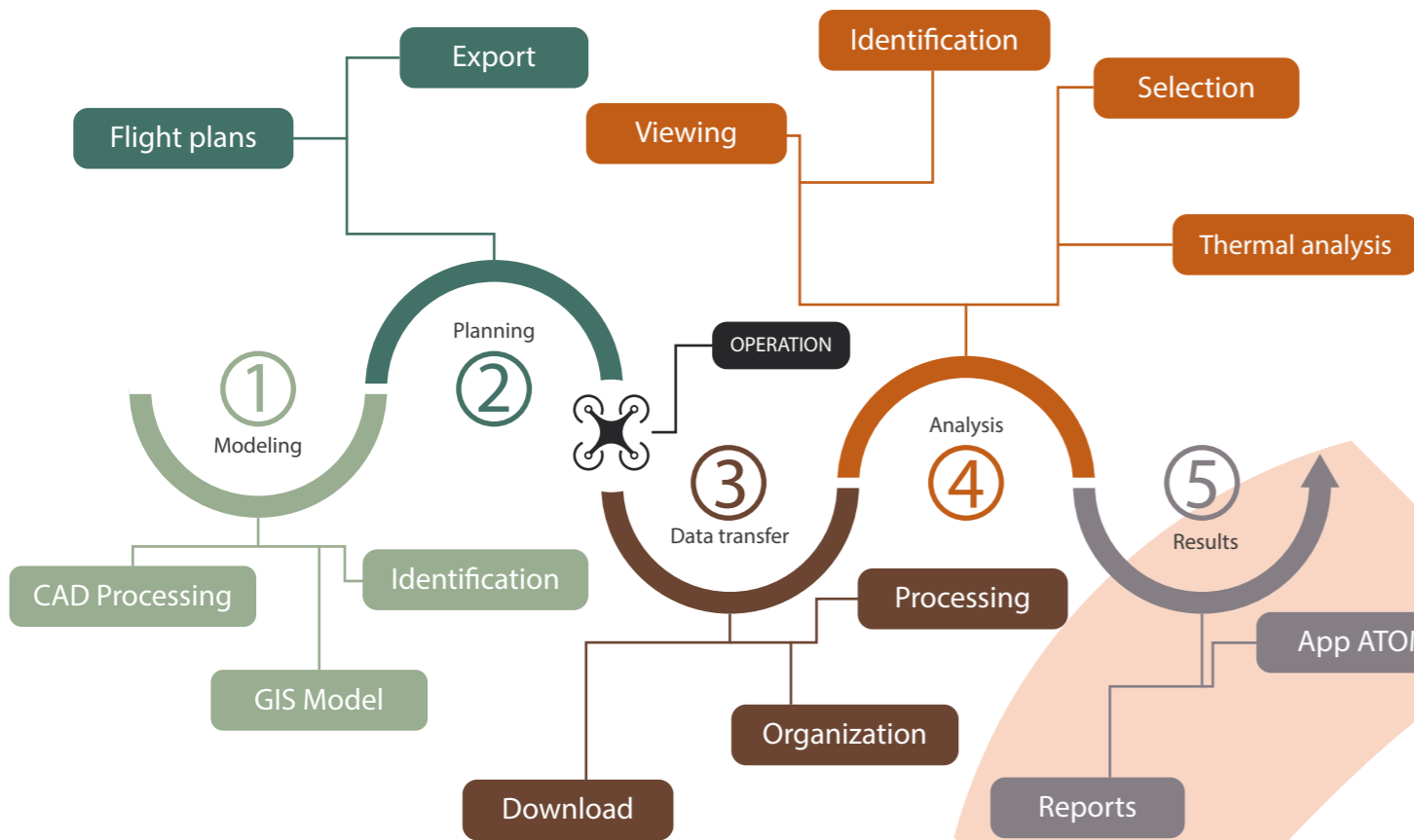
aerotools-uav.es atom-uas.com

info@aerotools-uav.es

(+34) 722 233 458



ADVANCED INSPECTION WORKFLOW



"Technological solutions of digitization and drones for a new scenario in the industry"

MODELING

"As-built" drawings are processed to generate the DIGITAL MODEL of PV plants in a GIS framework. The whole plant and its elements (modules, trackers, combiner boxes, inverters, etc) are georeferenced to allow an easy identification of elements or the location of incidents.

PLANNING

Automated generation of flight plans using ATOM software. This module provides straightforward process to export flight missions with the specific format for a number of commercial aerial platforms and ground station software.

DATA TRANSFER

Once images and metadata are captured at the plant, the ATOM working flow for data transfer allows fast access from central office or remote working stations. Folder organization or renaming of multiple files can be performed at this stage for a proper analysis.

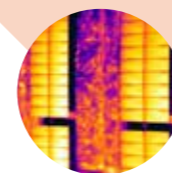
ANALYSIS

Different analysis techniques can be used with ATOM: Thermal analysis of modules complying with IEC standards or in a High Resolution mode for deeper details; the Electroluminescence technique based on drone operation; or manual inspection of a number of elements.

RESULTS

Automatic generation of reports in a variety of formats, including summaries and aggregated results for each Plant or Powerblock, specific report with graphic evidences for each incident. Results and additional information generated are accesible through ATOM webplatform for O&M managers and staff.

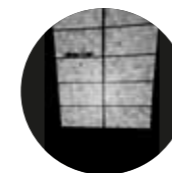
KEY FEATURES



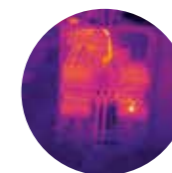
MODULES THERMAL ANALYSIS COMPLYING WITH IEC STANDARDS (Drone flight Altitude 30 m)



HIGH RESOLUTION MODULES THERMAL ANALYSIS (Drone flight Altitude 15 m)



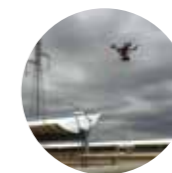
DRONE BASED ELECTROLUMINESCENCE ANALYSIS



COMBINER BOXES AND INVERTERS THERMAL ANALYSIS (On-ground data capture)



DRONE BASED AUTOMATED INVENTORY OF MODULES FOR TRACEABILITY



DRONE BASED THERMOSOLAR PLANTS INSPECTION

