

# Thermal Screening UAV for Solar Panels and Electric Towers

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**Abstract:** *These days, enormous windmills, solar panels, heating towers, and power plants are frequently situated in isolated locations and may experience heating problems. The operator must climb to these high places and search for heating problems to identify these problems. Therefore, there is a risk to life. Sending numerous crews with protective gear to various towers and panels comes at a considerable cost. It takes a great deal of time to climb each tower and carefully inspect for problems. Therefore, we suggest a replacement solution that uses a thermal screening drone to quickly and efficiently check for heating problems. To ensure extended range control during flying, the drone is equipped with a controller. The thermal sensor can have a limited resolution and be unable to detect problems with thermal heating from things that are close together. Using a raspberry pi, the thermal sensor footage is captured for subsequent review. As a result, the thermal screening procedure is automated and made safer by the drone. We will facilitate the process and assist industries in taking more care of safety to prevent mishaps in this way*

**Keywords:** Thermal screen, drone, solar panel, heat sensor