ABSTRACT

Unmanned aircraft or commonly called UAV (Unmanned Aerial Vehicle) is an unmanned vehicle in the air that can fly without a pilot, use aerodynamic force to generate lift, can fly autonomously, or be operated with radio control. However, it is not uncommon for UAV users to experience obstacles when flying them, such as the UAV suddenly falling while in the air. This is due to the lack of a feature to determine the battery capacity of the UAV, so users cannot know the estimated time and distance that the UAV can cover until it lands again.

We need a feature to determine the battery capacity of the UAV while carrying out flying operations. With the method of measuring battery capacity using a current sensor and a voltage sensor based on data testing by calculating battery power consumption, a system can be made that can provide information about the estimated time and distance of the UAV. The system can send real-time information to users so that users can monitor and estimate the time and distance of the UAV until it lands again.

Keywords: UAV (Unmanned Aerial Vehicle), battery, time and distance, sensor, monitoring