

## ABSTRACT

Computerization is one activity that always helps human activities on modernization of the current era. One factor that makes us worry is the rise drop in power supply voltage and power failure from PLN. So that it can hamper our work. One tool that can help is UPS. UPS is the system the provision of electric power is used as a bastion of power failure connected the power supply to the computer.

To make this tool from input voltages of 220V PLN piped to the battery, which then controlled using a microcontroller, at the time of charging to reduce the risk damage to the battery. when the battery is fully charged then the microcontroller perform termination flow automatically. Then the battery in the form of DC voltage is divided with some 12V, 5V, dan 3,3V to distribute the motherboard voltage during power outages. But if there is no power failure, the function of the power supply that works for applying a voltage to the motherboard in the form of a DC voltage.

Of charging had done when not obtained average yields voltage blackout to voltage 12v 11.56v of , 5v of 5.21v to voltage , and voltage of 3.35v 3.3v -12v of -10.80v to voltage . While for the measurement of a voltage when blackout to voltage 12v 11.45v of , 5v 5.22v voltage is as much as , and voltage of 3.31v 3.3v is to voltage -12v -10.80v is as much as . To the measurement of the current in voltage 12v 0.8a is as much as , 5v 1.9a in voltage is as much as , voltage 3.3v 0.6a is as much as , then to voltage -12v 0.6a is as much as . The measurement of current when charging the battery of 1.1a .

Keywords : ups , power supply with batteries.