ABSTRACT

Along with the increasing national electricity demand, resulting in the occasional time the State Electricity Company (PLN) has to rotate power outages because the load capacity has exceeded the specified capacity. A power cut done suddenly will cause electronic equipment to be damaged quickly and the work (data) that we do will be lost.

UPS (Uninterruptible Power Supply) associated with a centralized backup energy provider with an arduino application module so that it can complete switching and protection that can be used to assist automated work, with the LCD display indicator on the UPS system (Unintrerruptible Power supply), the LCD display is added as a battery voltage reading information display.

The use of the current and the use of the load that is being given to the UPS (Uninterruptible Power Supply) so that users can find out the capacity, work capability, and an estimate of how long the UPS can be used. On testing the battery in every 1% the difference in the measurement of the battery is worth 0.02 Volts and the output voltage of the inverter is worth 220Volt, able to light the load in the form of lights, fans.

Keywords: UPS (*Uninterruptible Power Supply*), Arduino, LCD (*Liquid Crystal Display*).