

ABSTRACT

Population growth continues to increase resulting in the need for energy continues to grow. Sources of energy used to generate electricity is still dominated by fossil fuels. Micro-hydro is a renewable energy source that is environmentally friendly and has the potential to replace fossil fuels and has a lot of potential in hilly areas. To create this new energy, the author makes a Brake Control Micro-Hydro Power Plant with the aim of the generator being able to last a long time from damage. This generator can filter the incoming voltage to maintain the electrical components in it. The power plant will consist of an LDR sensor as a light value, a voltage sensor as a voltage value, Arduino as a control, a servo motor as a brake control driver, an LCD as monitoring, a charger controller as an I/O voltage, after that the electric current will enter a charger controller. then accommodated in a battery and forwarded to an AC inverter output and DC output.

Keywords: MHP (Microhydro Power Plant), Brake Control, Charger Controller I/O, Voltage Sensor and LDR, Arduino.