

ABSTRACT

High Voltage Power Supply (HVPS) is a high voltage power supply that is usually used as an Electro Spining, Soft x-ray, materials synthesis and more. HVPS there are two types of direct current and alternating current. HVPS there are two types manual and automatic. In the present study developed HVPS direct current using a microcontroller, by this method has an advantage that is not contained in the manual as HVPS voltage can be set using a computer, can be programmed and faster towards the set points. HVPS that can be set by the computer is usually relatively expensive, so this research is made with a relatively cheap price and components that are easy to come, with such equipment maintenance easier and cheaper. With the output voltage of 0-5 KVDC, with kemampuan power 0,085 W. The method used is Step up Transformer and Voltage Multiplier.

Keywords: HVPS, microcontroller, power, voltage, Step up Transformer, Voltage Multiplier.