



005-EP

# Design and Simulation of Adjustable High Voltage DC Power Supply

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*High Voltage Power Supplies plays a vital role in electrostatic applications. High voltage Power Supply is being used for industrial and scientific purposes by scientists, engineers, and specific users of electrostatic applications. Significant monitoring is required for industrial processes to maximize quality, production and cost reduction. Power Supply also affects the scientific experiments as by contributing effects like output accuracy, ripple and regulations. Advancements in the power electronics technology have advanced the level of monitoring and process control The High voltage Power supply makes all these processes and experiments possible. During all these industrial and scientific processes many problems occurs with incoming power supply including voltage instability, waveform distortion which can have a very high impact on equipment's, operations. A novel High Voltage Power Supply is presented which will rectify the major problems occurred during the operation such as ripple regulation, voltage instability. A power supply will take AC input rectifier to get adjustable DC high Voltage. The user will get voltages from 1KV to 12 KV at a safe current of milliamps.*