

10kW HIPIMS power source

Product Code: HIPIMS Power Supply

Weight: 0.00kg

Dimensions: 0.00cm x 0.00cm x 0.00cm

Short Description

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Description

HiPIMS power supply is a kind of pulse power supply. By reducing the duty cycle to less than 10%, the peak current of magnetron sputtering can be increased by three orders of magnitude under the same power. This paper will introduce the influence of pulse waveform on glow discharge characteristics, which will provide a reference for controlling the glow discharge characteristics of different targets and optimizing the process.

- 1) In the process, high peak current and low target voltage are often desired, but they are often contradictory and need to be considered comprehensively in the process.
- 2) There are many adjustable parameters of HiPIMS power supply. Even under the same duty cycle, the pulse width, duty cycle, target voltage and peak current will have different characteristics for different targets, which increases the process control means and also increases the difficulty of optimization.
- 3) The peak current density increases with the increase of target voltage, but the change trend of peak current is different in different voltage sections.
- 4) Under the long pulse width, the metal discharge will enter the self-sustained discharge mode, which will reduce the sputtering speed, but can increase the species and quantity of ions, which need to be selected according to the process requirements.

Specification

Technical parameters

Input Voltage & Frequency	3 phases 380V
Output current	10A
Output Power	10kW
Work mode	DC
Working frequency	Less than 50% or 100%