

15kW Mid Frequency Plasma Power Source

Product Code: Mid frequency power source

Weight: 0.00kg

Dimensions: 0.00cm x 0.00cm x 0.00cm

Short Description

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* Special for PECVD film formation of photovoltaic cell tube, depositing nano silicon nitride film on the surface of silicon wafer

Built-in lightning arrester and surge dual protection, FC passive filter + EMI filter, no interference to equipment system;

* Main circuit PFC + (Sic and IGBT) combined full-bridge circuit, combined with DSP + FPGA digital control,

Output stable square wave voltage, wafer SPC uniformity < 3.95%

* New generation Sic semiconductor device reliability > 12 times MOSFET thermal conductivity 4 times faster;

Power failure rate < 0.1%

* The power transformer is made of nanocrystalline magnetic core material:

Has extremely high magnetic permeability, high saturation magnetic induction intensity, low Los, wide frequency characteristic, small magnetic leakage, small volume, simple and convenient winding, easy voltage resistance control and fault risk less than 1.

* Arc suppression management

When I-Arc is detected, the power can be cut off and restarted within < 10ms.

Control adjustment starts within $< 1 \mu\text{s}$ when V-Arc is detected

Residual Arc energy $< 1\text{mJ/kW}$, prevent sticking point scorch; improve yield; sticking point scorch $< 0.16\%$

* Sic device adopts large water cooling system + auxiliary air cooling design

Multiple temperature control monitoring and protection Compared with imported products, the temperature is 4 to 6 degrees lower, and the power density of the same size is more than 10%.

* Configuration panel operation and Modbus communication; dual operation and monitoring, communication protocol compatible with German Hottinger power supply, easy to install quickly, connect equipment PLC, easy to operate.

Specification

Technical parameters	
Input Voltage & Frequency	3 phases 380V
Output Power	15kW
Output voltage	600V
Working frequency	40Khz