

射频发生器

RF power supply



产品用途 Application

● 适用领域：

光伏产业、平板显示器行业、半导体行业、化工业、实验室、科研、制造业等。

● 适用工艺：

等离子体增强化学气相沉积（PECVD）、等离子体刻蚀、等离子体清洗、射频离子源、等离子体扩散、等离子体聚合溅射、反应溅射等。

● Application field

Photovoltaic industry, flat panel display industry, semiconductor industry, chemical industry, laboratory, scientific research, manufacturing industry, etc.

● Applicable technology

Plasma enhanced chemical vapor deposition (PECVD), plasma etching, plasma cleaning, RF ion source, plasma diffusion, plasma polymerization sputtering, reactive sputtering, etc.

产品特点 Features

- 全数字控制，高稳定度和高可靠性
- 进线具有APFC模块，提高输入侧功率因数，降低谐波
- 优化结构设计，功率密度大
- 高亮LCD显示，操作直观
- 稳定可靠的功放和直流控制模块
- 连续、脉冲输出模式
- 驻波1.5时仍能输出额定功率
- 三个可编程模拟量输出
- 完善的保护功能

- Full digital control, high stability and reliability
- The incoming line has an APFC module to improve the power factor at the input side and reduce harmonics
- Optimized structure design, high power density
- Highlight LCD display, intuitive operation
- Stable and reliable power amplifier and DC control module
- Continuous and pulse output mode
- Rated power can still be output when standing wave is 1.5
- Three programmable analog output
- Perfect protection function

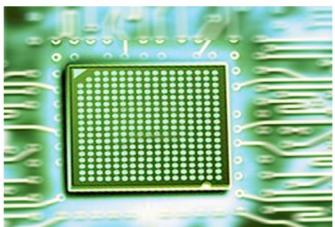
型号定义 Model Definition



规格参数 Specification Parameter

输入	
输入电压	AC220V ± 10% 3Φ AC380V ± 5%
输入频率	45 ~ 65Hz
输出	
输出频率	2MHz、13.56MHz、27.12MHz、40.68MHz
输出功率	0.5 ~ 5kW
输出功率调节范围	1 ~ 100%
输出阻抗	50Ω+j0
输出接口	N型
输出模式	连续、脉冲
脉冲频率	0.1 ~ 10kHz
占空比	10 ~ 90%
性能指标	
功率因数	0.98
频率稳定精度	± 0.005%
效率	75% (额定输出时)
谐波	< -45dBc
杂散	< -50dBc
外部控制接口	模拟量、通讯、同步
通信方式	标配：RS485通讯接口，可选Ether CAT、工业以太网等

Input	
Input voltage	AC220V ± 10% 3Φ AC380V ± 5%
Input frequency	45 ~ 65Hz
Output	
Output frequency	2MHz、13.56MHz、27.12MHz、40.68MHz
Output power	0.5 ~ 5kW
Output power regulation range	1 ~ 100%
Output impedance	50Ω+j0
Output interface	N type
Output mode	Continuous and pulse
Pulse frequency	0.1 ~ 10kHz
Duty cycle	10 ~ 90%
Performance index	
Power factor	0.98
Frequency stability accuracy	± 0.005%
Efficiency	75% (at rated output)
Harmonic	< -45dBc
Stray	< -50dBc
External control interface	Analog quantity, communication and synchronization
Communication mode	Standard configuration: RS485 communication interface, optional Ether CAT, industrial Ethernet, etc



自动匹配器

Automatic matcher



产品用途 Application

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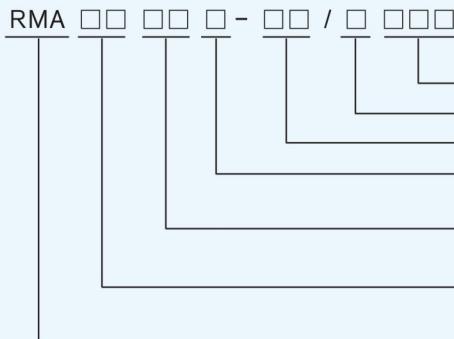
Plasma enhanced chemical vapor deposition (PECVD), plasma etching, plasma cleaning, RF ion source, plasma diffusion, plasma polymerization sputtering, reactive sputtering, etc.

产品特点 Features

- 全数字控制，匹配精度高，匹配时间短
- 采用真空电容，可靠性高，使用寿命长
- 结构紧凑，体积小，安装便捷
- 超宽匹配范围，可定制适配任意负载
- 具有手动/自动匹配功能
- 具有保持和预置设定功能
- 具有通讯功能，可独立连接上位机实时显示负载状态

- Full digital control, high matching accuracy and short matching time
- Adopt vacuum capacitor, high reliability and long service life
- Compact structure, small volume and convenient installation
- With an ultra wide matching range and can be customized to adapt to any load
- With manual / auto matching functions
- With the functions of keeping and preset
- With communication function can independently connect to the upper computer to display the load status in real time

型号定义 Model Definition



厂家自定义

Manufacturer customization

通讯方式

Communication mode

输入电压 (S2: 1Φ220V)

Input voltage (S2: 1Φ220V)

负载类型

Load type

L: L型 P: π型

L: L mode P: π mode

输出频率

Output frequency

适配频率 13: 13.56MHz

Adaptive frequency 13: 13.56MHz

输出功率

Output power

08: 800W 15: 1500W

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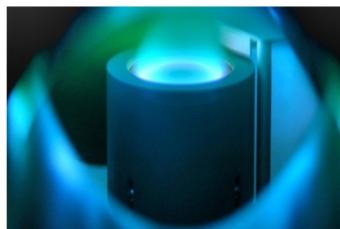
RMA系列自动匹配器

RMA series automatic matcher

规格参数 Specification Parameter

控制电压	AC220V ± 10%
传输功率	0.5 ~ 5kW
频率	2MHz、13.56MHz、27.12MHz、40.68MHz
匹配时间	端对端 < 5S, 预设点到匹配点 < 0.5 ~ 3S
驻波	< 1.2
阻抗实部	5 ~ 200Ω
阻抗虚部	+200 ~ -200j
射频输出电压	4000Vpeak
射频输出电流	25 ~ 40Arms
输入接口	N型
输出接口	铜排或L29

Control voltage	AC220V ± 10%
Transmission power	0.5 ~ 5kW
Frequency	2MHz、13.56MHz、27.12MHz、40.68MHz
Matching time	End to end < 5S, preset point to match point < 0.5 ~ 3S
Standing wave	< 1.2
Impedance real part	5 ~ 200Ω
Impedance imaginary part	+200 ~ -200j
RF output voltage	4000Vpeak
RF output current	25 ~ 40Arms
Input interface	N type
Output interface	Copper bar or L29



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