



ACS Material Equipment Series

Microsecond Pulse Low-Temperature Plasma Experimental

Power Supply

(CTP-2000KM)

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Revision: 061626

Product Composition

1. Main Machine – 2000KM

2. Voltage Regulator

Rated input voltage: 220v | Rated capacity: 1kVA | Frequency: 50Hz | Output voltage range: (0-250) V

Rated output current: 4A | Number of phases: 1 | Weight: 6.5kg | Insulation heat class: F



Photo of Modulated Pulse Low-temperature Plasma Experimental Power Supply

Product Features

- Used to drive Dielectric Barrier Discharge (DBD) devices of various sizes of discharge gaps under various atmospheres (Air, oxygen, nitrogen and other inert gases)
- Suitable for use under varying pressure
- Lower heat energy of the reactor
- Adjustable power over a wide range
- Includes interfaces for input power measurement, high-voltage output voltage, current detection and synchronization
- The efficiency of the power supply can reach above 90%

Product Specifications

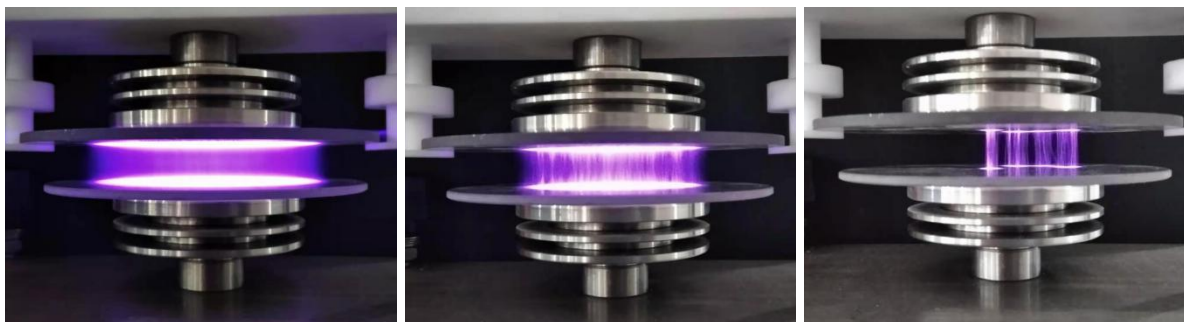
Product Name	Microsecond Pulse Low-Temperature Plasma Experimental Power Supply
Model	CTP-2000KM
Output voltage (KV)	~20
Center frequency (KHz)	~10
Adjustable Frequency Range (KHz)	7~15

DBD discharge gap	Within 8mm
Rise Time (μs)	~ 4
Pulse Width (μs)	~ 10
Monitoring and Detection	Output voltage detection (internal 1000:1 capacitive divider), instantaneous current detection, integral current detection
Waveform Parameter	Pulse (Selectable Pulse Polarity)
Power (W)	0-500
Unit Dimensions $W \times D \times H$ (mm)	250 \times 250 \times 360 (H)
Weight (kg)	9
Equipment Composition	1. Main Machine 2. Voltage Regulator

Applications

1. Surface modification treatment of organic and inorganic materials
 - Enhance compatibility of different polymer surfaces
 - Enhance suitability of biological surfaces
 - Clad nanomaterials
2. Preparation of organic or inorganic nanoparticles
3. Cleaning and sterilization

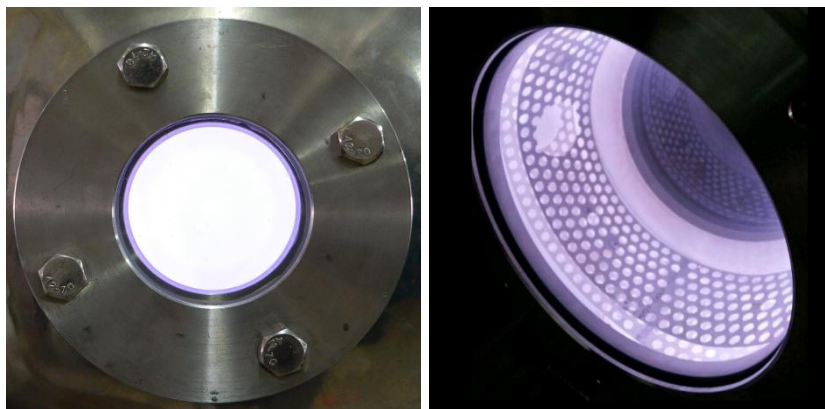
Application Examples:



(a)

(b)

(c)



(d)

(e)

Photo of Plasma Discharge

(a) DBD Strong Discharge (b) DBD Medium Intensity Discharge (c) DBD Weak Discharge

(d) Vacuum Argon Discharge (e) Vacuum Air Discharge

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