



## ACS Material Equipment Series

### Low-temperature Plasma Experimental Power Supply

(CTP-2000K)

- 1 – Product Composition
- 2 – Product Features
- 3 – Product Specifications
- 4 – Applications
- 5 – Application Examples

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## Product Composition

### 1. Main Machine - 2000K

### 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 Low-temperature Plasma Experimental Power Supply



Photo of Voltage Regulator

## Product Features

- Used for arc discharge, dielectric barrier discharge and glow discharge tests in various atmospheres (Air, oxygen, nitrogen and other inert gases)
- Suitable for use under varying pressure
- Generate various Dielectric Barrier Discharge (DBD) devices to produce long-term and stable streamer discharge or glow discharge
- Includes interfaces for input power measurement, high-voltage output voltage and current detection
- Generate various gas reactors, gas-liquid reactors or gas-solid reactors

## Product Specifications

Product Name	Low-temperature Plasma Experimental Power Supply- Base Model
Model	CTP-2000K
Output voltage (KV)	0~30
*Center frequency (fo) (KHz)	10 (Customizable 1~100)
**Frequency (KHz)	0.5 fo~2 fo (Adjustable)
***DBD discharge gap	Within 8mm
Frequency Range	Medium frequency
Output Signals	Single high-voltage output. One connected to high voltage, one connected to ground.
Fundamental Wave	Sine wave
Power (W)	0~500
Unit Dimensions W × D × H (mm)	250×250×360 (H)
Weight (kg)	8
Equipment Composition	1.Main Machine 2.Voltage Regulator

\*~10KHz calibrated using our [50mm Diameter DBD reactor \(SKU#EPDBD050\)](#).

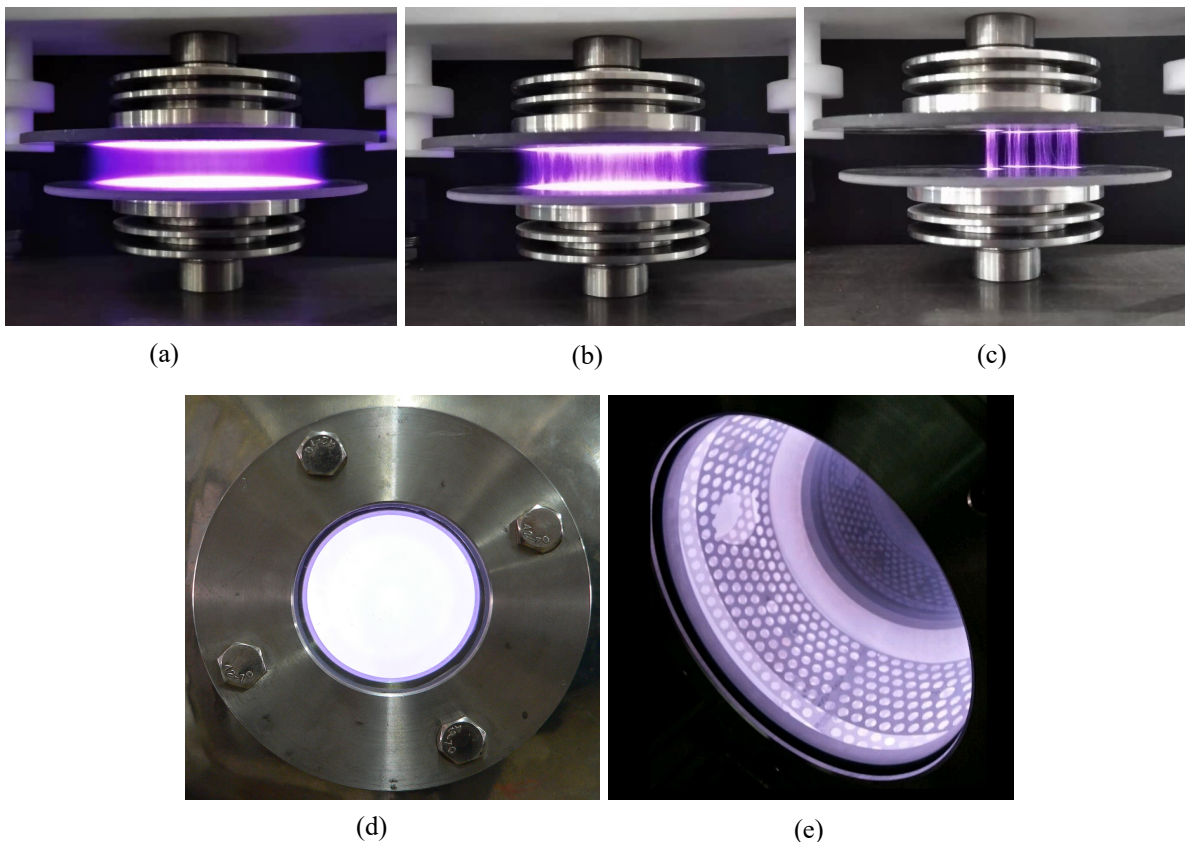
\*\*The Center frequency of 1-40 khz has adjustable frequency range of 0.5 Fo~2 Fo; 40-70 khz has adjustable frequency range of 0.5 Fo~1.3 Fo; Above 75khz has adjustable range of 0.5 Fo~1.2 Fo.

\*\*\*DBD-50 only works with Models: [CTP-2000K](#), [CTP-2000K/P](#) and [CTP-2000K/L](#). For [CTP-2000K/S](#), this model will require a customized DBD reactor.

## Applications

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

## Application Examples:



### 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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