ACS Material Equipment Series

Low-temperature Plasma Experimental Power Supply

(CTP-2000K)

Contact Information:

ACS Material, LLC

Address: 959 E Walnut St., Suite 100

Pasadena, CA 91106, USA

Phone: (866)-227-0656

Fax: (781)-518-0284

E-Mail: contact@acsmaterial.com

Revision: 081022

Product Composition

1. **Main Machine - 2000K**

2. **TDGC2-1 Contact 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)
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

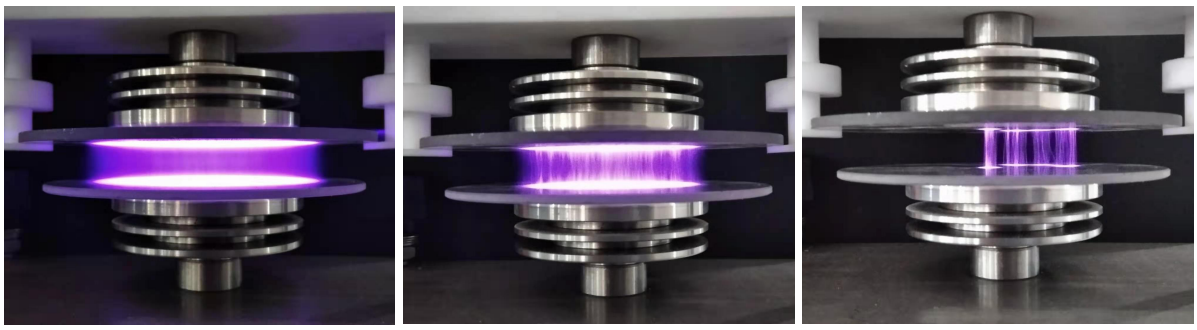
*~10KHz calibrated using our **50mm Diameter DBD reactor (SKU#EPDBD050)**.

**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.

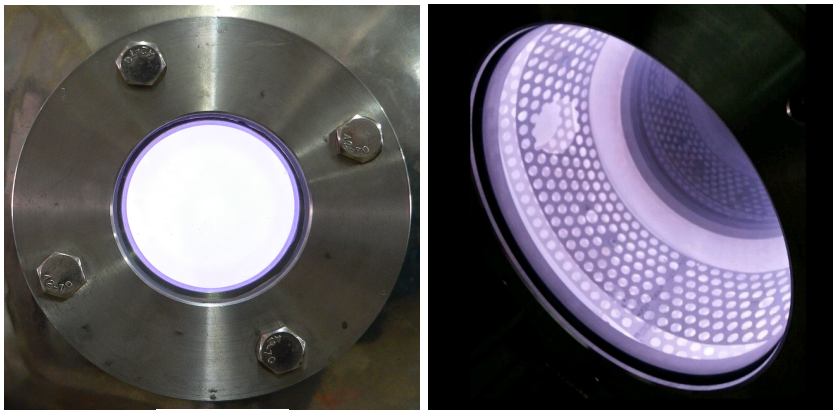
Applications

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

Disclaimer: ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties either express or implied, regarding the suitability of the material for any purpose or the accuracy of the information contained within this document. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.