



ACS Material Equipment Series

Differential Output Low-temperature Plasma Experimental

Power Supply

(CTP-2000K/S)

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

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/S

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 Differential Output Low-temperature Plasma Experimental Power Supply



Photo of Voltage Regulator

Product Features

- Drives the DBD discharge device with a large discharge gap (20-30 mm) under various atmospheres (Air, oxygen, nitrogen and other inert gases) for long-term and stable discharge
- Generates various Dielectric Barrier Discharge (DBD) gas reactors or gas-solid reactors with large discharge gaps
- Includes interfaces for input power measurement, high-voltage output voltage and current detection
- The efficiency of the power supply can reach above 90%

Product Specifications

Product Name	Differential Output Low Temperature Plasma Experimental Power Supply
Model	CTP-2000K/S
Output voltage (KV)	0~60
*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)	250×250×380 (H)
Weight (kg)	12
Equipment Composition	1.Main Machine 2.Voltage Regulator

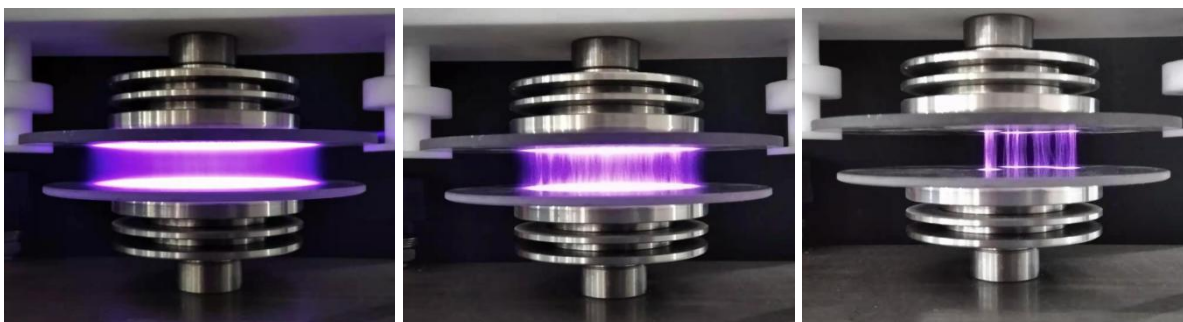
*~10KHz calibrated using our [50mm Diameter DBD reactor \(SKU#EPDBD050\)](#).

**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 biocompatibility of the material surface
 - 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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