

Gas Plasma Cleaners | Economic, Low-frequency

PM110C

Low-frequency output Low-frequency high voltage power supply

Reaction chamber Chamber dimensions $\Phi 100 \times L160\text{mm}$

Economic, surface modification and cleaning of target objects by the active action of ionized gas.



■ Features

- Economic plasma cleaner.
- Simple plasma treatment operation.

■ Control panel



■ Viewing window



■ Plasma experiment examples



No plasma treatment plasma treatment 10 min

Radish seed germination promotion experiment results
Germination status 1 day after plasma treatment (treatment gas: atmosphere)

■ Promising applications

applications <cleaning>

- Removal of organic films (oil, wax, etc.).
- Cleaning of electronic parts, optical parts, and small components, pre-treatment before electroplating, coating.
- Bacteria disinfection (cell membrane etching by oxygen radicals or disinfection by UV).

<Surface modification>

- Imparting functional groups to the surface of polymer materials → Improving adhesion and adhesion. Through oxidation reaction, functional groups such as $-\text{OH}$, $>\text{C}=\text{O}$, $-\text{COOH}$ are generated on the surface (affected by trace amounts of water and carbon dioxide).
- Improving the adhesion of various polymers and the biocompatibility of medical and dental materials.
- By treating the culture dish, it can be evenly coated with medium, etc.

<Etching>

- Etching of organic polymer materials. For organic polymers, oxygen can become the etching gas, allowing for resist etching.
- Promoting seed germination experiments.

■ Specifications

Model	PM110C
Plasma generation source	Low-frequency high voltage power supply, output approx. 50w, frequency 60KHz, output voltage 10kV
Electrode structure	Capacitive type, 2 segments
Gas flow meter	For oxygen, flow rate 30~300ml/min
Vacuum adjustment valve	For vacuuming, returning to atmosphere
Reaction chamber dimensions	Chamber dimensions $\Phi 100 \times L160\text{mm}$
External dimensions (W×D×H mm)	310×300×448
Power supply 50/60Hz	AC220V 10A
Vacuum pump interface	KF25 (recommended vacuum pump exhaust speed 30L/min)
Gas interface	Outer diameter $\Phi 6.35\text{mm}$

1 Sterilizers

2 Granulation and Spray Dryers

3 Muffle Furnaces

4 Ovens

5 Incubators

6 Plasma Equipment

7 Water Purifiers

8 Baths

9 Water Circulators

10 Rotary Evaporators

11 Freeze Dryers & Cold Traps

12 Stirrers & Shakers

13 Washers

14 Analysis and Test Devices

15 Options