IPC CLEAN

Ion cleaning device to remove static electricity and dust of circuit boards, molded components, and during powdering work.

H E P A filter installed

No need of Compressed air

350x345mm Space saving


Optical equipment


Cosmetic container


Printed-circuit board


Transparent components and films


Chemical powder


Precision molded part

ION PARTS CLEANER

IPC-250CR

Ion Parts Cleaner [IPC CLEAN]

RoHS

New concept of Ion Cleaning!

Feature

AC adapter connection terminal and external power supply terminal block are installed on the top.

Built-in HEPA filter.
Replaceable by unit.

The generated ions are downflowed with the wide air blow.

Air indicator for checking the wind speed

Clean blower air with HEPA filters

- Clean air with 99.97% of particles of 0.3μm retained by the filter. (Maximum: 25m/s of wind speed, 1.5m^3/min of air flow)
- Acrylic resin plate, preventing diffusion of air in the front of the product. (Removable)

Installation of DC ionizer and creation of neutralization area

- A space 270W x 270D x 250H(mm) is "uncharged".
- The ion balance can be adjusted and the needle electrode can be replaced.
- Warning lamp for high voltage error.

Air blow speed can be adjusted.

- The amplitude of the wind speed is displayed by a 12-stage LED indicator.
  This is also a guide for replacing the HEPA filter.
- Minimize this will produce a nearly wind-free state, so it can be used for powder work that is not likely to splash.

LED illumination

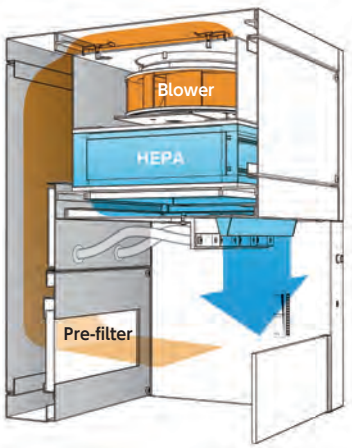
- Lightens your works brightly with LED lamps that can also be used as operating lamps.

Put the product on the wall surface.

- No protrusions or power terminals installed on the back of the device.
  You can use the workbench space effectively.

Air circulation type, with no exhausted air.

- The Air is vacuumed up from the pre-filter at the back of the booth passing through the inside blower and is filtered by the HEPA filter, then is blown back from the top of the booth.



Performance data

■Static elimination performance/noise/wind speed

LED Level	Decay time		Ion balance (±V)	Noise (dBA)	Wind Speed (m/s)
	Negative (sec.)	Positive (sec.)			
1	1.4	1.2	10	52.3	0
3	0.3	0.3	10	52.3	1.0
6	0.2	0.2	10	55	2.0
9	0.2	0.2	10	60	3.0
12	0.2	0.1	10	68	4.0
12(max.)	0.1	0.1	10	73.3	7.0

●Measured on April 12, 2018 at 25℃ (temperature) and 45%RH (humidity).
Decay time, Ion Balance measured with "TREK 158" CPM at 100mm distance from the air outlet.
Noise measured with "SL-1320" at 1m front.
Airflow velocity measured with "SK-93F" just below the air outlet.

■Air cleanliness (HEPA filters) <99.9% or more>

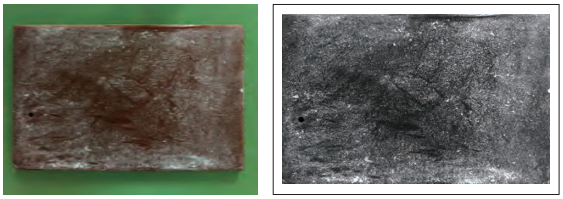
Particle	0.3μm	0.5μm	5μm	Total
Primary side	16,165,100	4,884,000	0	21,049,100
Secondary side	420	0	0	420

●Measured on April 13, 2018
Airflow: Max
Tested particle: PAO (Polyalphaolefin mist)
Particulate measured with KC-01DI (primary side, after air passing through the blower) and KC-03B (secondary side, after passing through the HEPA filter)

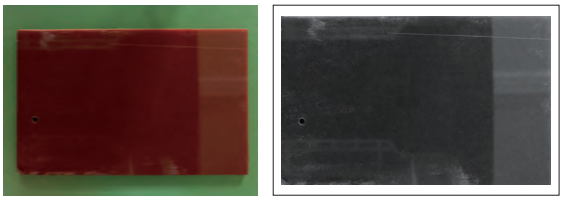
■Dust removal test

Sample: Bakelite plate (150×90 mm, 3 mm thick)
Pseudo-contaminant: cotton linter
Static elimination time: 3 seconds (inclined at 45° with respect to the air outlet)

Before dust removal charging voltage: +1.25kV



After dust removal charging voltage: 0kV



The white reflective cotton linters have been effectively removed.

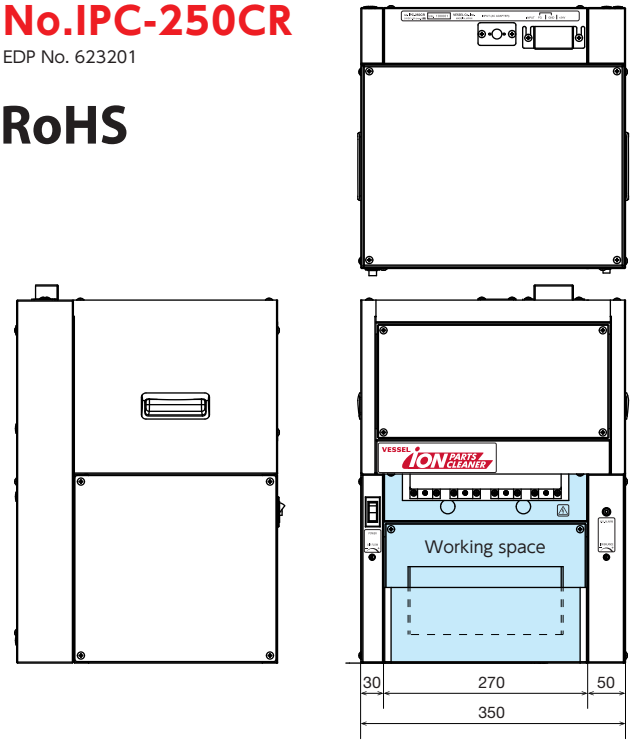
●Measured on April 11, 2018 with Electrostatic Field Meter Eye-02, at Max Wind Speed at 26℃ (temperature) and 45%RH (humidity)

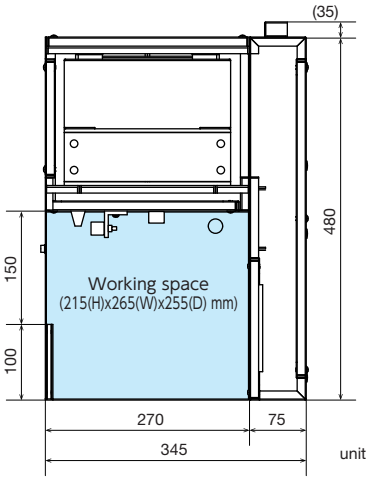
Dimensions

No.IPC-250CR

EDP No. 623201

RoHS





unit : mm

APPLICATIONS (Static elimination and dust removal)

- For decomposition and repair of mobile phones and small electronic devices
- Before assembly of various receiving components
- Products before UV processing and silk printing
- Plastic moldings
- Glass substrates and semiconductor devices
- Before product packaging

Replacement parts

Pre-filter	IPC-250CRPF
HEPA filter	IPC-250CRHF
Needle electrode	SDJ-05RH

Option

Power adapter AD24-150-PD4
EDP 806146
I/P 100V to 240 V AC, 50/60 Hz
O/P 24V DC 5A

■Specifications

Model No.	IPC-250CR
Dust collection method	Built-in pre-filter and HEPA filter (two-stage)
Reference work size	A4 size with forward and backward changes, and A5 size without changes
Power supply	24V DC ±5%
Power consumption	108 W max.
Current consumption	4.5 A max. (excluding inrush)
Protective function	Overcurrent protective fuses (250V 3A)
Air flow	Max. 1.5 m³/min (No internal filter clogging, output value of the blower)
Wind speed	Max. 25m/sec. (No clogging of built-in filter, output value of the blower)
Noise	74 dBA (Maximum air flow, no clogging of built-in filter or deterioration of blower)
Operating temperature and humidity	+5 to +40℃ 35 to 65% RH (no condensation or freezing)
Size	350W×345D×515H (without protrusions)
Weight	Approx.22 kg
Material	Steel Sheet (Munsell color N9.0, spray-painted finish)
Accessory	Caution label sticker / Instruction manual

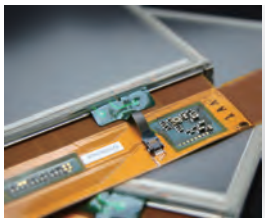
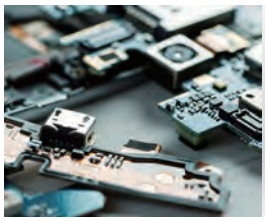
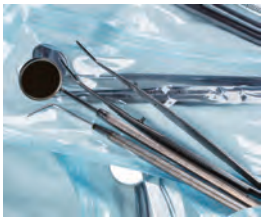
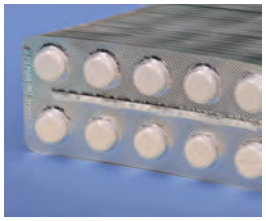
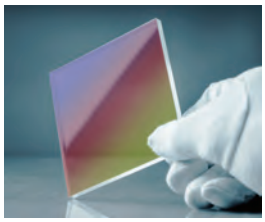
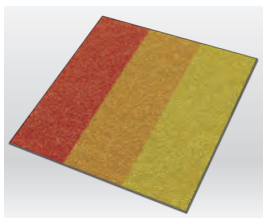
■Ionizer

Ionizing method	DC corona discharge type
Number of discharge electrodes	4 pieces (Positive 2 and Negative 2)
Applied voltage	+6kV, -3 to -7kV
Effective static elimination current	300 μA or less
Electrode coupling method	direct coupling
Material of the discharge electrode	Stainless-steel
Ion balance	±30V
Decay time	Within 1 second measured at 100 mm from the air outlet (±1000V→100V)
Alarm output	High-voltage output stop warning (red LED)

■Maintenance time *It depends on usage conditions.

Pre-filter	1 week (recommended daily cleaning)
HEPA filter	1 year
Discharge needle	1 week

■APPLICATIONS

	Ion cleaning	Removal of charge
Automotive parts	  Substrates, Speedmeter, Needle display parts, etc.	  Emblem, Metal parts (static elimination before hot stamping), Reflector (static elimination before vapor deposition), LCD module (protection film release)
Cellular phone	  Lenses, Component trays, Switches (before the resin plating)	  Cover (before painting), LCD module, Printed circuit board (release of protection film)
Optical Electronics	  Printed circuit boards, Glass lenses	  Touch panel (before silk printing), Remote control button (before pad printing), Plastic lens (before UV processing)
Pharmaceutical	  Dental mirrors, PET medicine bottles, Cosmetic bottles	  Drug trays (before packing), Powder (at the time of balance)
Plastic	  Major appliances, Transparent products	  Insert molded article (before double molding) Metallic coated article (before coating)

Warning

- Be sure to read the instruction manual for safe use of the product. • Do not use the product for any other purpose than static elimination or dust elimination.
- Never expose the product vacuum to fire, explosive dust, or dust-containing liquid mist to prevent fire accidents.
- Never expose the product vacuum to moisture, such as wet dust, water, or oil to prevent product failures and accidents.
- Never use the product in such application to prevent fire accidents, as dust can be mixed inside the product and converted into hazardous materials.
- Usage as a painting booth is prohibited. Do not paint.

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