

Clean & Compact

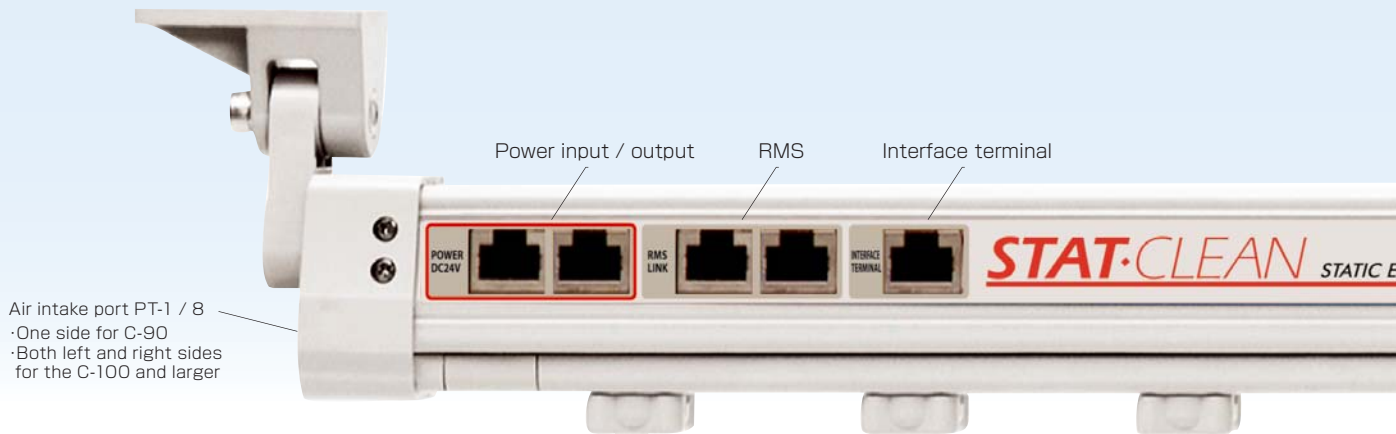
Newly designed high-precision and high-speed ionizer
applying a new technology



STAT·CLEAN

C-series Ion Bar

AC Pulse Ionizing Clean Bar

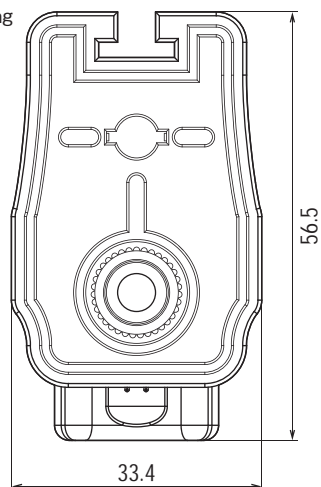


COMPACT *Super Compact Design*

NEW

Slim & lightweight body

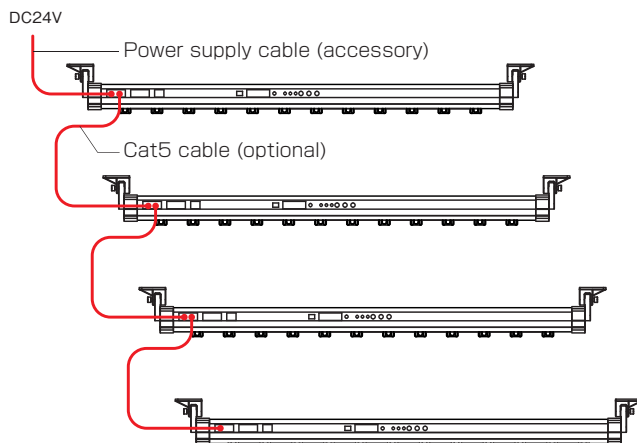
Super-compact design having high-voltage power supply, control circuit and air circuit inside.
(Actual size shown on right)



NEW

Terminals grouped on one side

Enabling a daisy-chain connection.

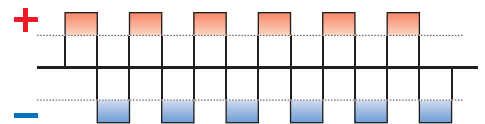


SPEED *Super Fast Static Electricity Removal*

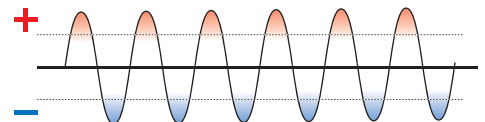
AC pulse method

Generating alternately positive ions and negative ions from each electrode.
Since ions are generated at the maximum width of each positive and negative electrode cycle, the ion volume is high and static electricity can be removed quickly.

AC pulse



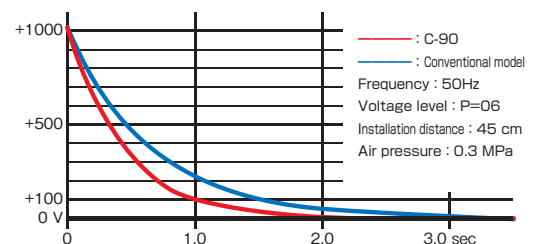
Typical alternating current



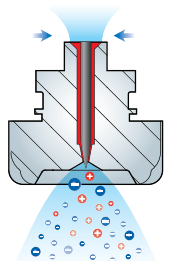
NEW

Super fast static electricity removal

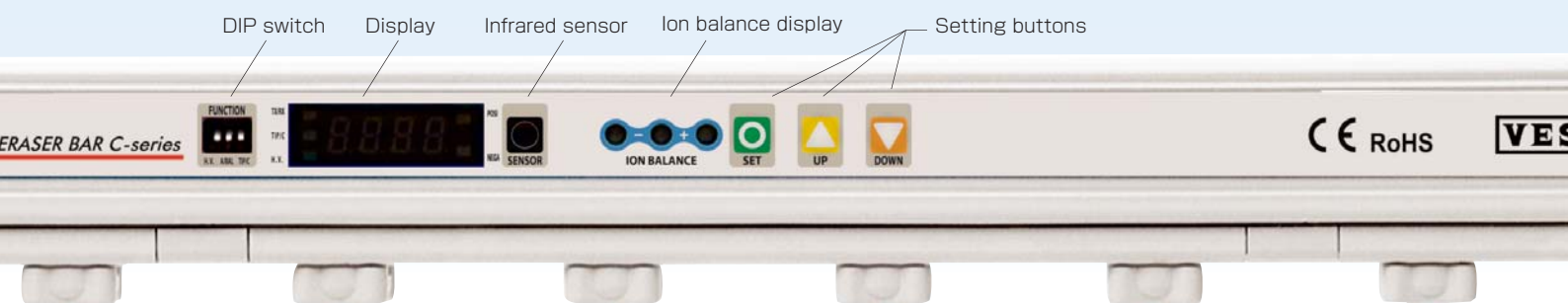
The newly developed needle electrode socket incorporates an air purging structure which has air emission ports around the needle electrode.



This structure not only prevents contamination of the electrode needle, but also feeds ions with a fast air flow to neutralize.



Compact bar type ionizers for high-speed neutralization with a clean design

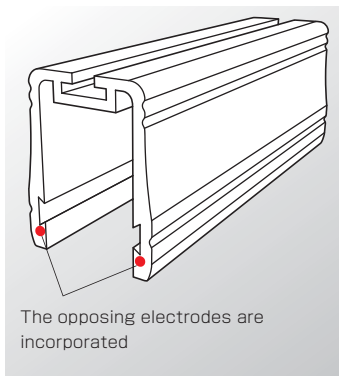


CLEAN *Clean Design*

NEW

Preventing body contamination

The opposite electrodes are incorporated in the body. This design enables to prevent particles from adhering to the outside of the body due to the induced voltage and to improve the ion generation efficiency by minimizing applied voltage losses.



One-touch needle replacement.

A socket type needle can be easily replaced.

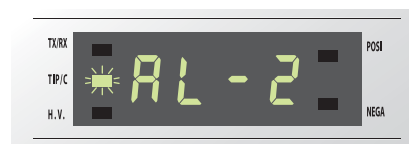


MAINTENANCE

NEW

Needle cleaning timer

The timer notifies when to clean needle electrodes. The cleaning timing can be set in one-day units from 1 to 60 days. When the time elapses, the needle cleaning lamp turns ON and "AL-2" appears on the display.



High Voltage Alarm

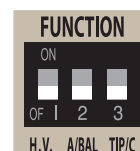
If a problem occurs at the high voltage output, the high voltage error lamp lights and "AL-1" appears on the display.



NEW

DIP switch

Select with DIP switch, whether to stop or continue operation when a high voltage error occurs, the ON or OFF state of the auto balance mode, and the ON / OFF state of the needle cleaning timer.



NEW

Interface Terminal

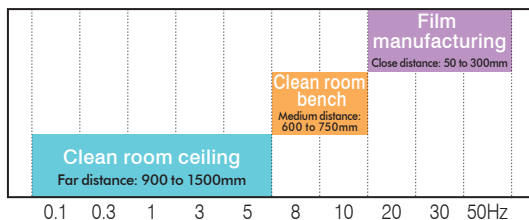
The run / stop state, high voltage error alarm signal and needle cleaning alarm signal can be output with the photo relay output. Remote operation can also be turned ON or OFF with the 24 VDC input.



SETTING *Various Settings*

Frequency

The frequency can be set in ten steps (0.1 to 50 Hz).



Voltage Level

The applied voltage can be changed individually for the positive and negative side. The amount of ions can be changed by different output steps. (Ten steps: 8.0 to 12.5 kVp-p)

Voltage level	1	2	3	4	5	6	7	8	9	10
Positive voltage (kV)	4	4.25	4.5	4.75	5	5.25	5.5	5.75	6	6.25
Negative voltage (kV)	4	4.25	4.5	4.75	5	5.25	5.5	5.75	6	6.25
kV p-p	8	8.5	9	9.5	10	10.5	11	11.5	12	12.5

Pulse Ratio

The ion balance can be adjusted by changing the pulse ratio.

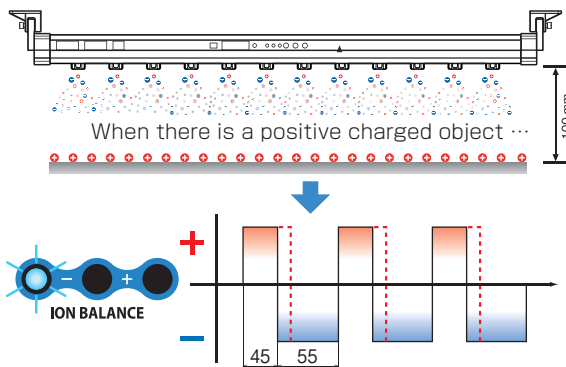
Address

When using multiple units, an address allocation (1 to 16) can be set to identify each device.

Auto Balance Mode

NEW

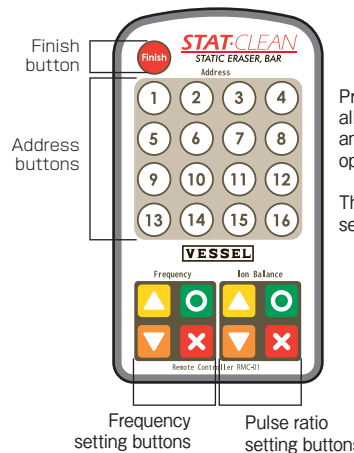
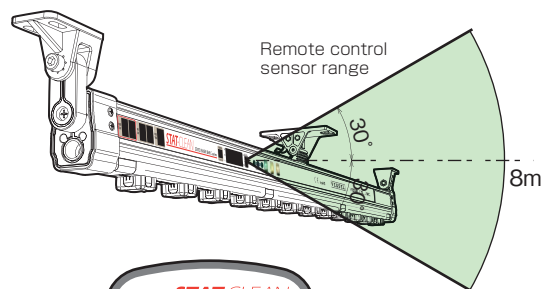
This C series is equipped with a mode to optimally adjust the ion balance automatically according to the polarity of the charged matter. (Target distance: 50 to 100 mm)



More amount of negative ions is generated and discharged

Card-type Remote Controller

This card-type remote controller is thin enough to fit in your pocket. The C series can be controlled from a distant location.



Press twice a number allocated to the bar, and it temporarily suspends operation.

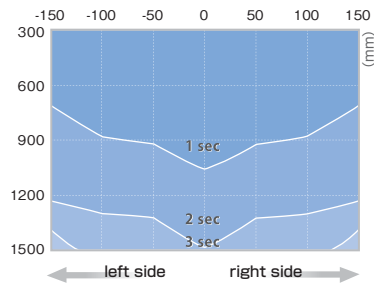
The frequency and pulse ratio settings can then be changed.

Static erasing performance

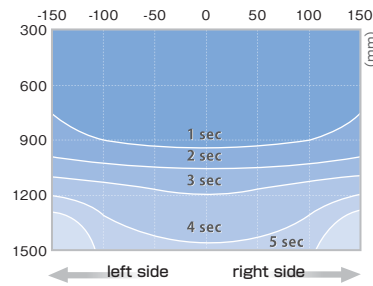
Measurement conditions

·Product:C-150 ·Voltage: 10.5kV (P-06 N-06) ·Air pressure: 0.3MPa ·Temperature: 24°C±1°C ·Humidity: 40%±2%RH ·Decay time: ±1000V→±100V ·CPM: 20pF±2pF (150x150mm)

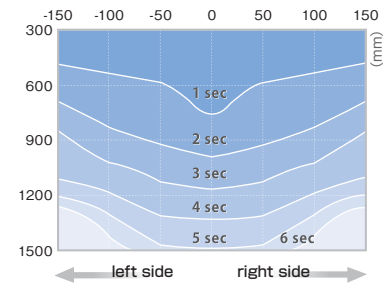
●Frequency : 0.1Hz



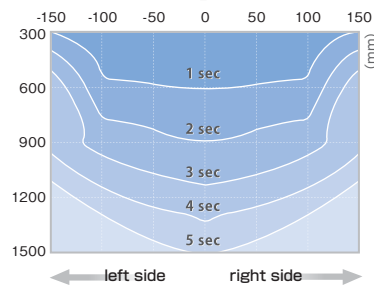
●Frequency : 0.3Hz



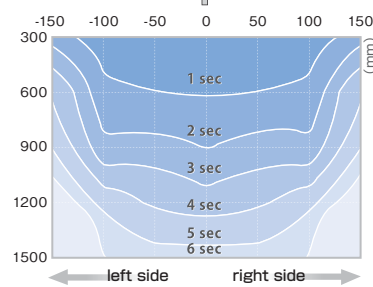
●Frequency : 1Hz



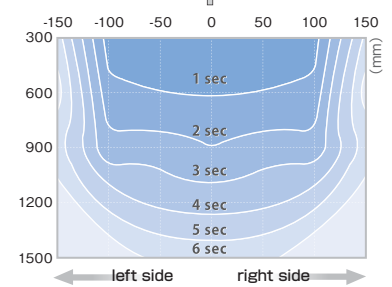
●Frequency : 3Hz



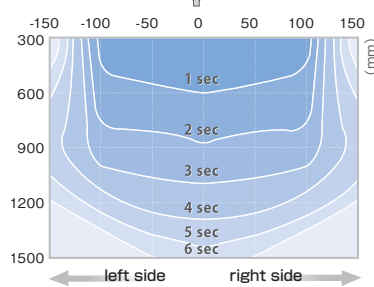
●Frequency : 5Hz



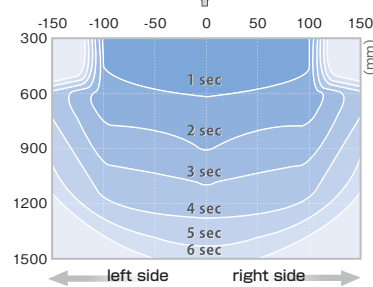
●Frequency : 8Hz



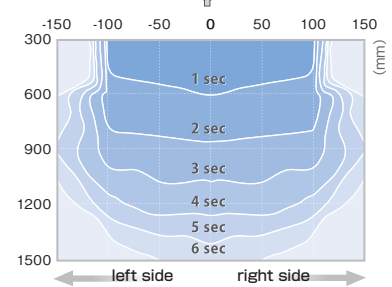
●Frequency : 10Hz



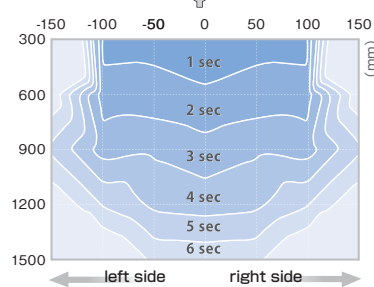
●Frequency : 20Hz



●Frequency : 30Hz



●Frequency : 50Hz



Specifications

Ionizing method	Pulse AC Corona discharge
Input power supply	24 VDC ± 5 % (connector RJ45)
Power consumption	max 14.4W
Air supply hose diameter	PT 1 / 8, Hose ø8 mm OD×ø6 mm ID
Air supply	Clean dry air or nitrogen (N2) (0.3 MPa or less)

Setting functions

Applied voltage	:Max. 12.5 kVpp Each polarity can be set in ten steps from 4.00 to 6.25 kV
Frequency	:Select from ten steps 0.1, 0.3, 1, 3, 5, 8, 10, 20, 30, 50 Hz
Pulse width	:Positive ion 40 to 70 %, negative ion 60 to 30 %
Auto balance	:Effective when Auto Balance mode is enabled (Distance 50 to 100 mm)
Needle cleaning timer	:Effective when needle cleaning timer is enabled (One day unit from 1 to 60 days)

Ion balance	± 30 V (Distance 1000 mm)
Alarm output	High voltage error, Needle cleaning timer (Only when set) [Connector RJ45]
Operating temperature and humidity	0 to 50 ° C, 35 to 85 %RH (With no dew condensation or freezing)
Operating distance	Approx. 50 to 2000 mm
Ozone production	0.05 ppm or less
Decay time	See illustration above (These are measured values and not guaranteed values)
Material	Body: Flame-retardant ABS resin, Needle electrode: Tungsten
Accessories	Instruction Manual, Remote controller×1, Power cable (5 m)×1, End brackets×2, Middle bracket (See back side)
Airflow (L / min)	C-90 C-100 C-120 C-150 C-170 C-200
0.1MPa	45 60 75 80 85 90
0.2MPa	80 95 110 125 140 150
0.3MPa	100 130 150 175 195 210

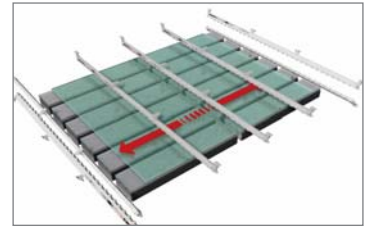
Applications



Clean room ceiling



Automobile component painting line

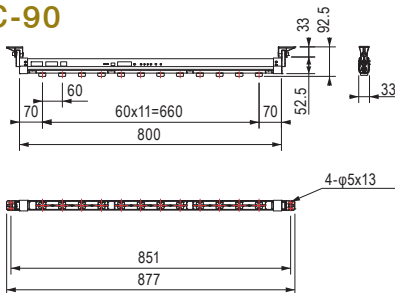


Glass substrate transfer

External dimensions

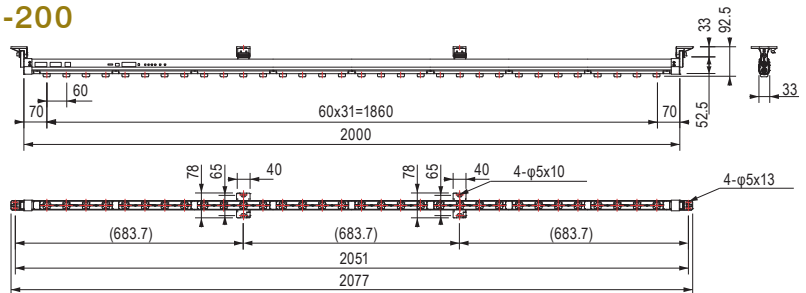
(mm)

C-90



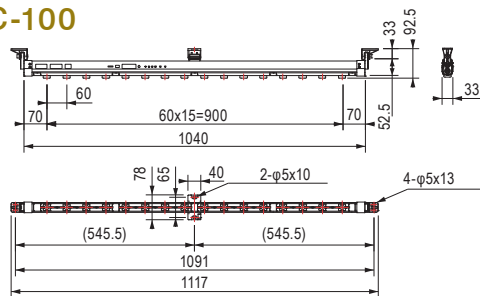
Electrode needles:12pcs / Middle bracket:No / Weight:0.9kg
EDP No:621851

C-200



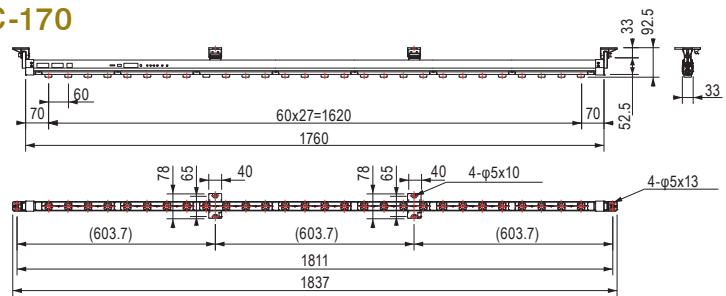
Electrode needles:32pcs / Middle bracket:2pcs / Weight:1.8kg
EDP No:621856

C-100



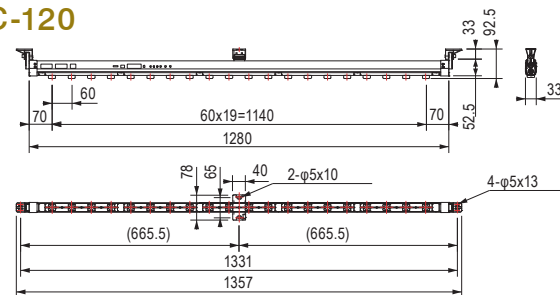
Electrode needles:16pcs / Middle bracket:1pc / Weight:1.0kg
EDP No:621852

C-170



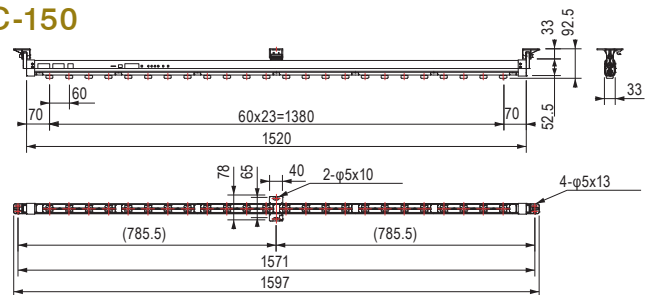
Electrode needles:28pcs / Middle bracket:2pcs / Weight:1.6kg
EDP No:621855

C-120



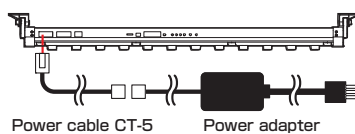
Electrode needles:20pcs / Middle bracket:1pc / Weight:1.2kg
EDP No:621853

C-150



Electrode needles:24pcs / Middle bracket:1pc / Weight:1.4kg
EDP No:621854

Example of power connection



Options

AD24-IT-EX :Power adapter (I/P:AC100V-240V O/P:DC24V 0.75A) , EDP No:806050
AD24-ITCF-EX :Power adapter (I/P:AC100V-240V O/P:DC24V 1.5A)
AD24-IT19-EX :Power adapter (I/P:AC100V-240V O/P:DC24V 1.9A)
CT-5 :Power cable (5m)



- For safety purposes, read the instruction manual carefully before using the unit.
- Do not use this product in an explosion-proof area.
- A high voltage is applied on this product. Make sure that water, oil, solvents, etc., do not come in contact.
- Avoid dew condensation as it can result in electric shock or product damage.
- Keep away metal objects such as tools or needles, or body parts such as fingers, hands or face from the needle electrode because a high voltage is applied on the needle electrode.

Manufactured by
VESSEL CO., INC.

17-25, Fukae-Kita 2-chome,
Higashinari-ku, Osaka 537-0001 Japan
Tel : +81 6 6976 7778 Fax : +81 6 6972 9441
E-mail : export@vessel.co.jp
URL : <http://www.vessel.co.jp/english/>

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