

**Discontinuation Notice of Fan Type Ionizer Model ZJ-FA01/02/03.**

**Product Discontinuation**



Ionizer  
**Model ZJ-FA01(D)/02(D)**  
**Model ZJ-FA03**  
**Model ZJ-FA03D**

Ion Monitor  
**Model ZJ-MA01**

Replaceable Filter  
**Model ZJ9-FL120**  
**(for Model ZJ-FA01)**  
**Model ZJ9-FL80**  
**(for Model ZJ-FA02)**

Replaceable Discharge Needle  
**Model ZJ9-NDT06F**  
**(for Model ZJ-FA01)**  
**Model ZJ9-NDT04F**  
**(for Model ZJ-FA02/03)**



**Recommended Replacement**

Ionizer  
**Model ZJ-FA20**  
**Model ZJ-FW013AC**  
**Model ZJ-FW013**

**No recommended replacement**

Replaceable Filter  
**Model ZJ9-FL120N1**  
**(for Model ZJ-FA20)**

Replaceable Discharge Needle  
**Model ZJ9-NDT06FN1**  
**(for Model ZJ-FA20)**  
**Model ZJ9-NDT04FW**  
**(for Model ZJ-FW013)**

**Discontinuation date : The end of March, 2013**

**Caution on recommended replacement**

There is not compatibility in discharge needles either. Please check the discontinued product list.

### Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
ZJ-FA20	--	--	--	--	*	*	*
ZJ-FA013AC	--	--	--	--	*	*	*
ZJ-FA013	--	--	--	--	*	*	*
ZJ9-FL120N1	*	--	-	-	-	-	-
ZJ9-NDT06FN1	*	--	-	-	-	-	-
ZJ9-NDT04FW	--	--	-	-	-	-	-

\*\* : Fully compatible

\* : The change is a little/Almost compatible

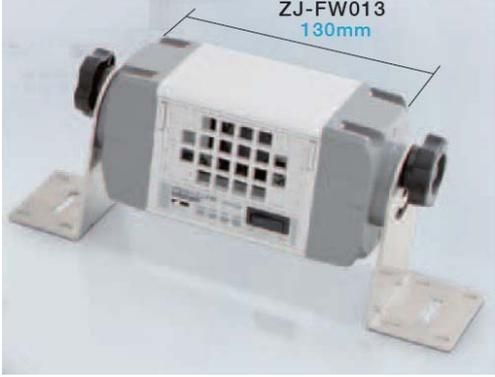
-- : Not compatible

- : No corresponding specification

### Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
ZJ-FA01	ZJ-FA20
ZJ-FA01D	ZJ-FA20
ZJ-FA02	ZJ-FA20
ZJ-FA02D	ZJ-FA20
ZJ-FA03	ZJ-FW013AC
ZJ-FA03D	ZJ-FW013
ZJ-MA01	No recommended replacement
ZJ9-FL120 (Replaceable Filter for ZJ-FA01)	ZJ9-FL120N1(Replaceable Filter for ZJ-FA20)
ZJ9-FL80 (Replaceable Filter for ZJ-FA02)	ZJ9-FL120N1(Replaceable Filter for ZJ-FA20)
ZJ9-NDT06F (Replaceable Discharge Needle for ZJ-FA01)	ZJ9-NDT06FN1 (Replaceable Discharge Needle for ZJ-FA20)
ZJ9-NDT04F (Replaceable Discharge Needle for ZJ-FA02/03)	ZJ9-NDT06FN1 (Replaceable Discharge Needle for ZJ-FA20)
	ZJ9-NDT04FW (Replaceable Discharge Needle for ZJ-FW013)

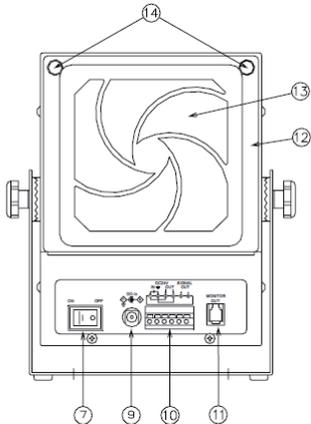
**Body color**

Product discontinuation	Recommendable replacement
<p data-bbox="185 353 603 389"><b>Model ZJ-FA01(D)/02(D)/03(D)</b></p>  <p data-bbox="185 1487 402 1523"><b>Model ZJ-MA01</b></p> 	<p data-bbox="829 353 1046 389"><b>Model ZJ-FA20</b></p>  <p data-bbox="829 864 1129 900"><b>Model ZJ-FW013(AC)</b></p> 
	<p data-bbox="890 1536 1270 1572">No recommended replacement</p>

# Wire connection

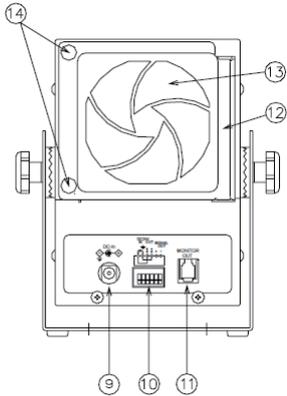
## Product discontinuation

### Terminal (Model ZJ-FA01(D))



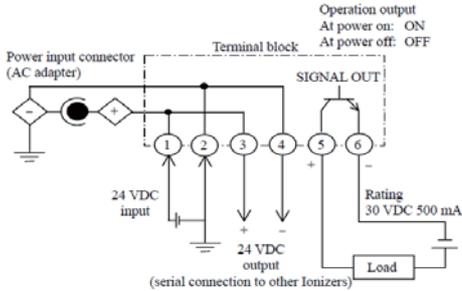
- (9) Power in connector (DC-in)
- (10) Terminal block
- (11) Ion Monitor connector (MONITOR OUT)

### Terminal (Model ZJ-FA02(D))



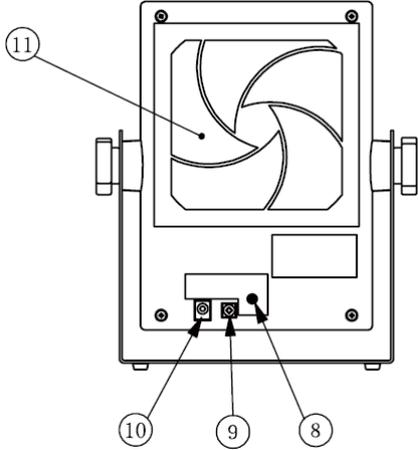
- (9) Power in connector (DC-in)
- (10) Terminal block
- (11) Ion Monitor connector (MONITOR OUT)

### Wire Connection (Model ZJ-FA01(D)/02(D))



## Recommendable replacement

### Terminal (Model ZJ-FA20)

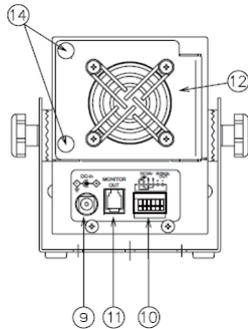


- (9) FG terminal
- (10) Power in connector (DC-in)

# Wire connection

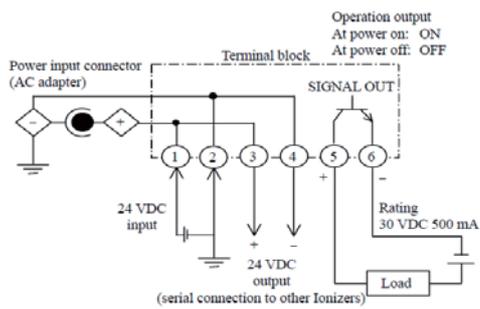
## Product discontinuation

### Terminal (Model ZJ-FA03(D))



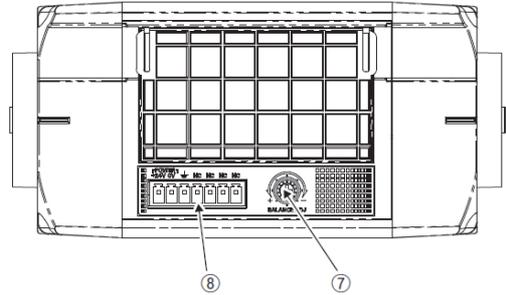
- (9) Power in connector (DC-in)
- (10) Terminal block
- (11) Ion Monitor connector (MONITOR OUT)

### Wire Connection

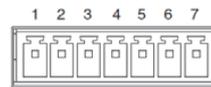


## Recommendable replacement

### Terminal (Model ZJ-FW013(AC))



- (8) Power in connector (DC-in)



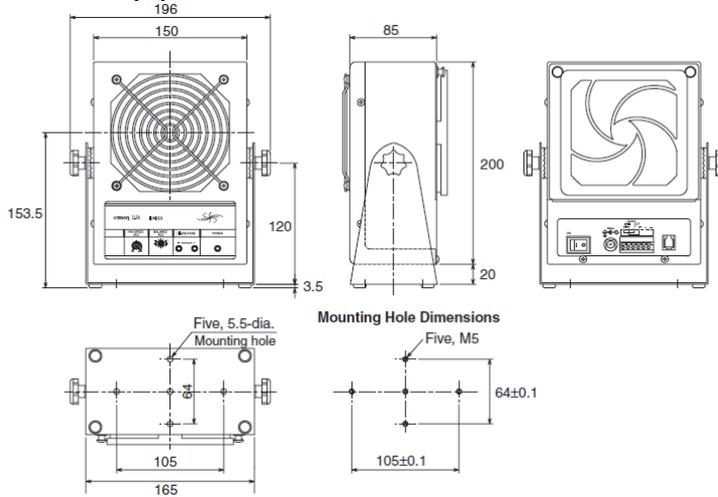
No.	Symbol	Input/ Output Signal
1	+24V	+power (DC24V)
2	0V	0V
3		Functional ground (Note: Be sure to connect to the ground with the ground resistance of 100 ohm or less.*)
4	NC	Not used
5	NC	Not used
6	NC	Not used
7	NC	Not used

\* The 0V terminal and functional earth terminal are connected inside the main unit.

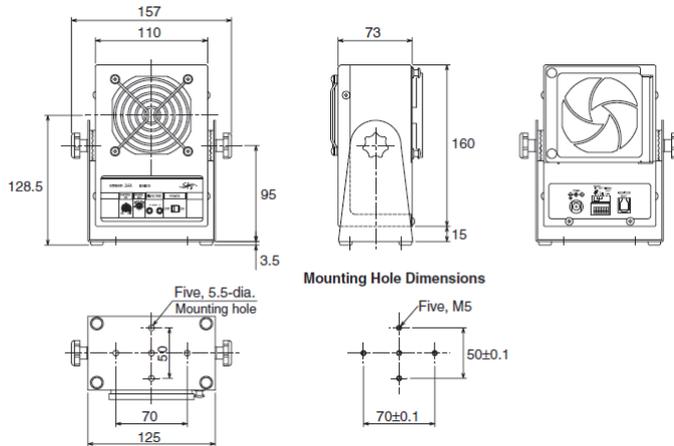
## Dimensions / Mounting dimensions

Product discontinuation

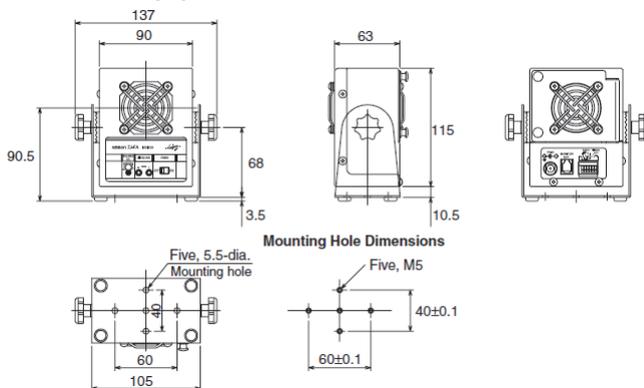
### Model ZJ-FA01(D)



### Model ZJ-FA02(D)



### Model ZJ-FA03(D)

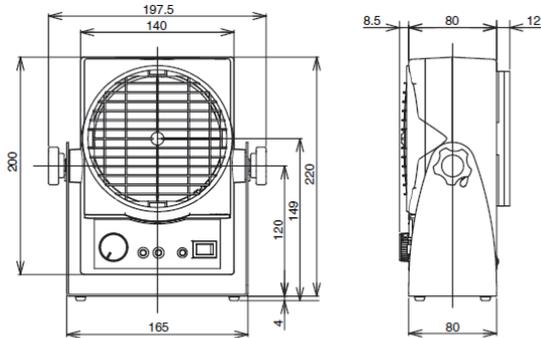


## Dimensions / Mounting dimensions

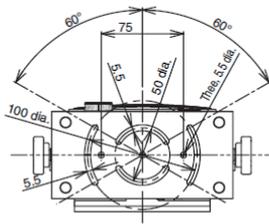
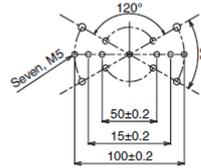
### Recommendable replacement

#### Model ZJ-FA20

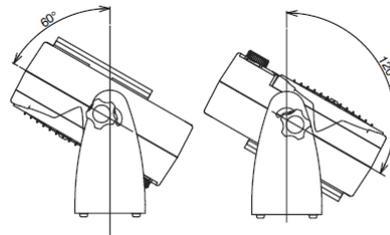
(Unit: mm)



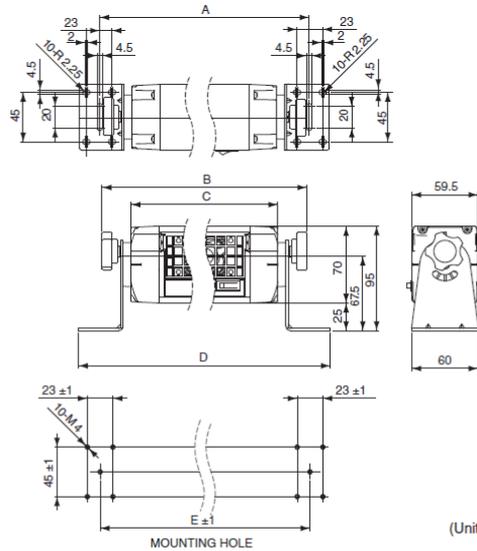
#### Mounting Hole Dimensions



#### Rotation Range



#### Model ZJ-FW013(AC)



(Unit: mm)

Model	Dimensions				
	A	B	C	D	E
ZJ-FW013	184.4	182	130	224.4	188.4
ZJ-FW029 *	344.4	342	290	384.4	348.4
ZJ-FW053 *	584.4	582	530	624.4	588.4

\* : Dimensions when using an optional product (ZJ9-BRL1FW).

## Characteristics

Item	Product discontinuation		Recommendable replacement Model ZJ-FA20
	Model ZJ-FA01(D)	Model ZJ-FA02(D)	
<b>Discharge time(*1)</b>	Within 1.5 seconds	Within 3.0 seconds	1.2 seconds (*2)
<b>Power supply voltage</b>	24 VDC ±10% ripple (peak-to-peak) 10% or less		24VDC(*3)
<b>Current consumption</b>	900 mA max. (*4)	600 mA max. (*4)	900 mA max. (*3)
<b>Output voltage</b>	5.0 KV max.		7.0 KV max.
<b>Airflow</b>	1.3 to 2.2 m <sup>3</sup> /min	0.47 to 0.8 m <sup>3</sup> /min	1.4 to 2.3 m <sup>3</sup> /min (*2)
<b>Amount of generated ozone</b>	0.01 ppm or less (measured at 10 mm from blow-off port)		0.01 ppm or less (measured at 50 mm from blow-off port)
<b>Ambient temperature</b>	Operating: 5 to 40°C, storage: 0 to 40°C (with no icing or condensation)		Operating / storage: 0 to 50°C (with no icing or condensation)
<b>Ambient humidity</b>	Operating: 35 to 65%, storage: 35 to 85% (with no condensation)		Operating: 35 to 65% Storage: 35 to 85% (with no condensation)
<b>Weight (In a packed state)</b>	Approx. 3.4 kg	Approx. 2.4 kg	Approx. 2.0 kg
<b>Indicators</b>	Power indicator: green High-voltage output operation indicator: yellow		Power indicator: green High-voltage output operation indicator: yellow Cleaning indicator: orange
<b>External output</b>	Operation output: output by photo MOS relay (30 VDC, 500 mA)		---
<b>Materials</b>	Case: SPCC melamine baked finished Air channel: ABS Discharge needles: Tungsten		Case: ABS Discharge needles: Tungsten Stand: SPCC
<b>Accessories</b>	Instruction Sheets, Warning labels, AC adapter (Type(D): not included)		Instruction Sheets, Warning labels (2types), AC adapter, FG connection cable(2m)

(\*1) Center of blow-off port, at a distance of 300 mm

(\*2) Typical default settings

(\*3) Be sure to use the included AC adapter for Ionizer operation.

(\*4) When the Ion Monitor (ZJ-MA01) is connected

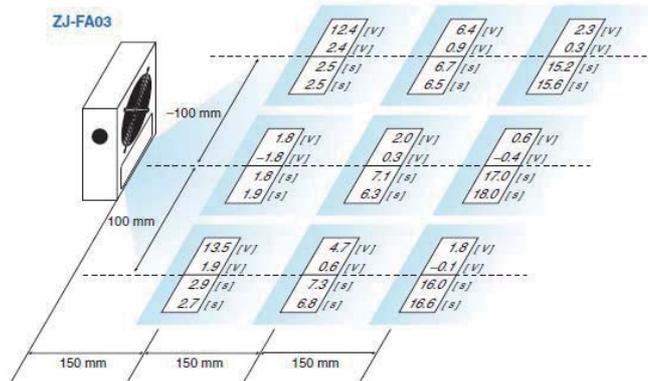
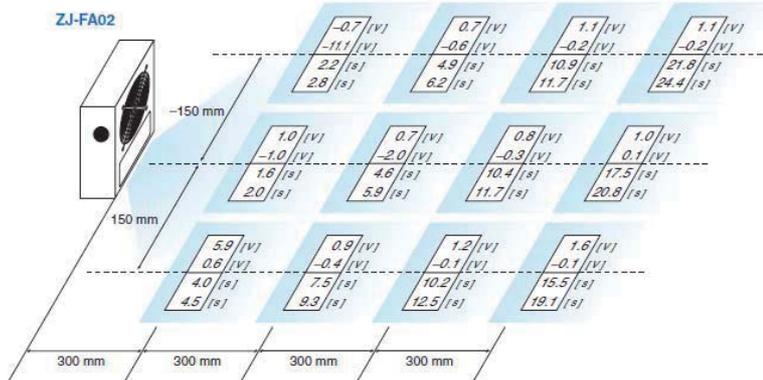
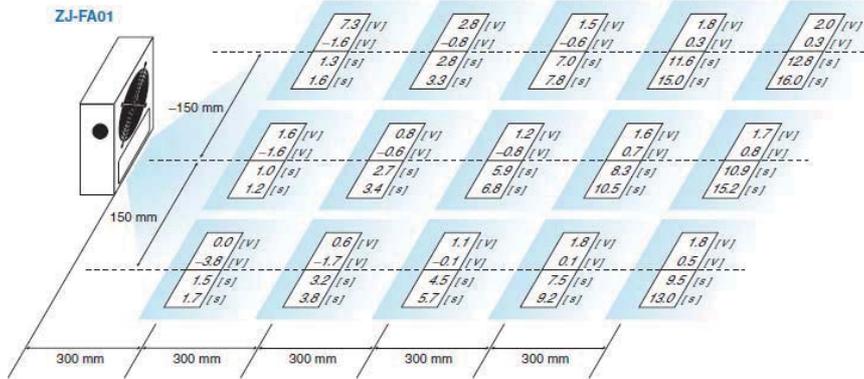
## Dimensions

Item	Product discontinuation Model ZJ-FA03(D)	Recommendable replacement Model ZJ-FW013(AC)
<b>Discharge time</b>	Within 1.5 seconds (Center of blow-off port, at a distance of 150 mm)	1.2 seconds (*5) (Center of blow-off port, at a distance of 300 mm)
<b>Power supply voltage</b>	24 VDC $\pm$ 10% ripple (peak-to-peak) 10% or less	24 VDC $\pm$ 10% ripple (peak-to-peak) 10% or less
<b>Current consumption</b>	600 mA max. (*6)	900 mA max.
<b>Output voltage</b>	5.0 KV max.	7.5 KV max.
<b>Ambient temperature</b>	Operating: 5 to 40°C, storage: 0 to 40°C (with no icing or condensation)	Operating / storage: 0 to 50°C (with no icing or condensation)
<b>Ambient humidity</b>	Operating: 35 to 65%, storage: 35 to 85% (with no condensation)	Operating: 35 to 65% Storage: 35 to 85% (with no condensation)
<b>Weight (In a packed state)</b>	Approx. 1.9 kg	Approx. 1.2 kg (Model ZJ-FW013)
<b>Indicators</b>	Power indicator: green High-voltage output operation indicator: yellow	Power indicator: green Fan operation indicator: green Alarm indicator: red Cleaning indicator: yellow
<b>External output</b>	Operation output: output by photo MOS relay (30 VDC, 500 mA)	---
<b>Materials</b>	Case: SPCC melamine baked finished Air channel: ABS Discharge needles: Tungsten	Case: ABS, Frame: Aluminum Discharge needles: Tungsten Mounting bracket: SUS
<b>Accessories</b>	Instruction Sheets, Warning labels, AC adapter (Type(D): not included)	Instruction Sheets, I/O connector, Streamer, Mounting bracket, AC adapter (only type(AC))

(\*5) Typical default settings

(\*6) When the Ion Monitor (ZJ-MA01) is connected

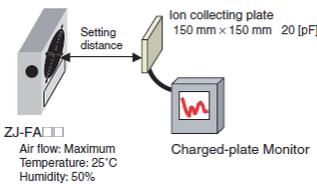
**Product discontinuation**  
**Model ZJ-FA01(D)/02(D)/03(D)**



**Meaning of measured value**

1.6 [V]	Maximum value of ion balance (10-s measurement)
-1.6 [V]	Minimum value of ion balance (10-s measurement)
1.0 [s]	Discharge time (from +1000 V to +100 V)
1.2 [s]	Discharge time (from -1000 V to -100 V)

**Measurement condition**

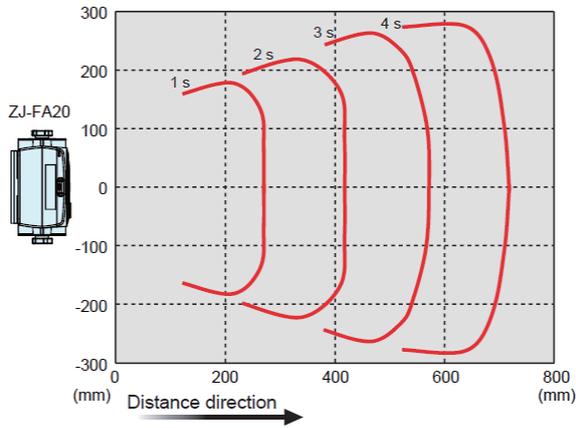


## Operation ratings

### Recommendable replacement

#### Model ZJ-FA20

##### Ionization Area vs. Ionization Time



##### Measurement Conditions

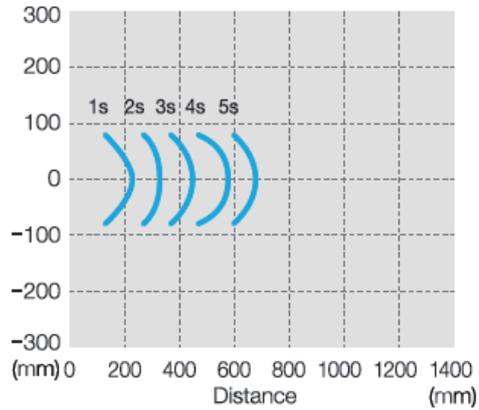
Airflow: Max.

Ionization time:  $\pm 1,000$  V to  $\pm 100$  V

Plate monitor: 150 X 150 mm, 20 pF

#### Model ZJ-FW013(AC)

##### Ionization Area



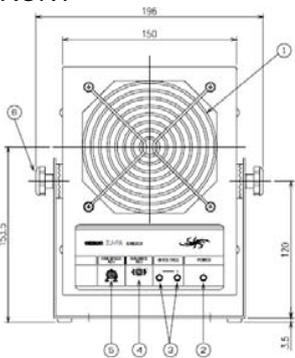
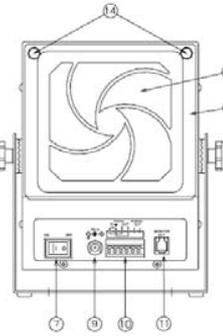
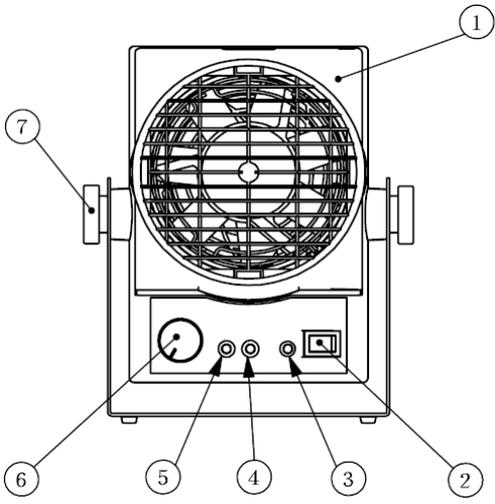
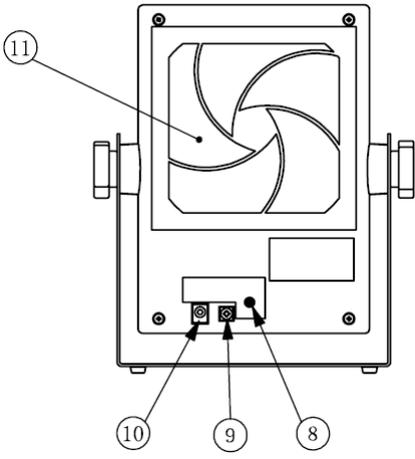
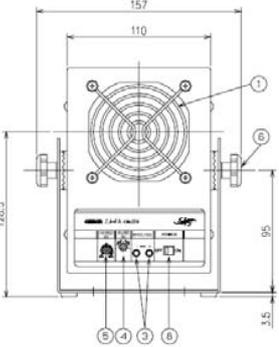
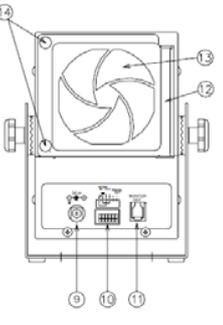
##### Measurement conditions

Airflow: Max.

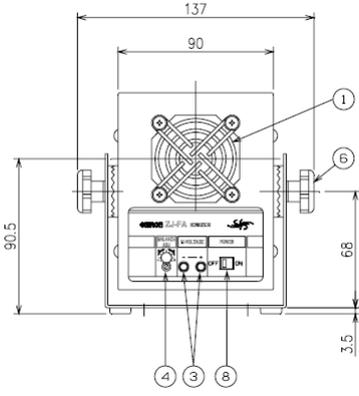
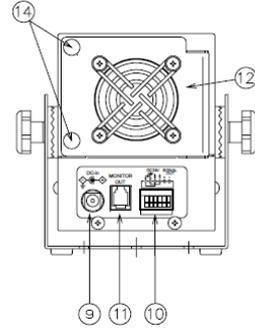
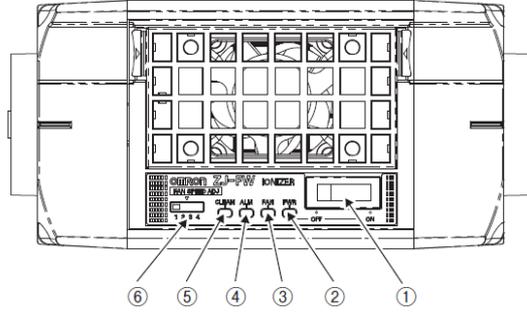
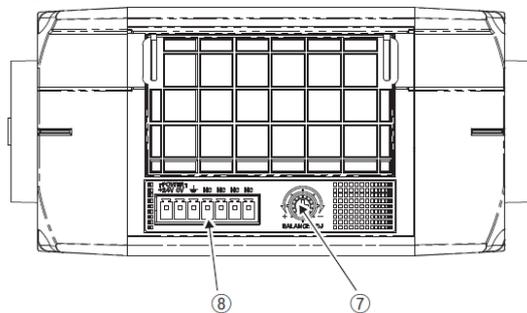
Ionization time:  $\pm 1000$  V to  $\pm 100$  V

Plate monitor: 150 x 150 mm, 20 pF

**Operation methods**

Product discontinuation	Recommendable replacement
<p><b>Model ZJ-FA01(D)</b> FRONT</p>  <p>REAR</p> 	<p><b>Model ZJ-FA20</b> Front</p>  <p>Rear</p> 
<p><b>Model ZJ-FA01(D)</b> FRONT</p>  <p>REAR</p> 	<p>Parts names (Model ZJ-FA20)</p> <ul style="list-style-type: none"> <li>(1) Front cover</li> <li>(2) Power switch</li> <li>(6) Fan speed adjustment control</li> <li>(7) Body fixing screw and angle adjustment washer</li> <li>(8) Ion balance adjustment control</li> </ul>

## Operation methods

Product discontinuation	Recommendable replacement
<p><b>Model ZJ-FA03(D)</b> Front</p>  <p>Dimensions: 137 (width), 90 (inner width), 90.5 (height), 68 (lower height), 3.5 (bottom thickness).</p> <p>Rear</p>  <p>Parts names (Model ZJ-FA01(D)/02(D)/03(D))</p> <ul style="list-style-type: none"> <li>(4) Ion balance adjust control</li> <li>(5) Fan speed adjustment control</li> <li>(6) Body fixing screw and angle adjustment washer</li> <li>(7) Power switch</li> <li>(8) Power switch and power indicator</li> <li>(12) Access panel</li> </ul>	<p><b>Model ZJ-FW013(AC)</b> Front</p>  <p>Rear</p>  <p>Parts names (Model ZJ-FW013(AC))</p> <ul style="list-style-type: none"> <li>(1) Power switch</li> <li>(6) Fan speed adjustment switch</li> <li>(7) Ion balance adjustment control</li> </ul>

As of April 2012

In the interest of product improvement, specifications are subject to change without notice.