

# Slim & High-speed Neutralization

Compact bar type ionizer with separate power supply for easy installation



**STAT-CLEAN SH-series Ion Bar**

AC Pulse Ionizing Bars (Separate power supply type)

# High-speed and Compact AC Pulse Ionizing Bar

This slim ionizer has been optimized for mounting in various facilities. The safe design incorporates a separate high voltage transformer wired with a shielded cable. High-speed static erasing is possible by purging clean air. Our selection of seven sizes supports various applications.

**SH-16**

EDP No.621541

**SH-20** EDP No.621542

**SH-30** EDP No.621543

**SH-40** EDP No.621544

**SH-50** EDP No.621545

**SH-60** EDP No.621546

**SH-70** EDP No.621547

High-voltage cable  
branch box

**SH-SP2** EDP No.621552

Power supply units  
supporting 100 to 240 VAC

**SH-G3** EDP No.621555

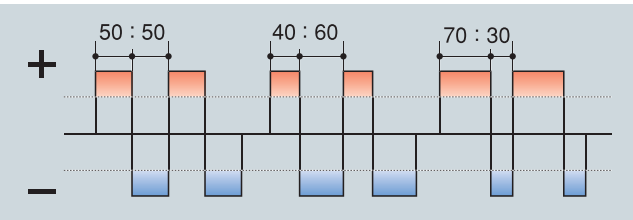
CE RoHS

PS E CE RoHS

# High-speed Static Electricity Removal

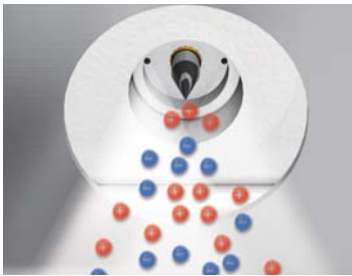
## Ion balance setting function...

The AC pulse method which alternately generates positive ions and negative ions has been adopted. The ion balance can be maintained at the optimum state by adjusting the pulse ratio.



## Air purging functions...

Adherence of particles onto the tip of the needle electrode is prevented by purging air toward the needle tip. This also assists to quickly emit ions which are newly generated.



## Safe Design

### Flexible silicone sheath cable adopted...

This cable cuts noises from the main unit and prevents other devices from being affected. The flexible cable is perfect for wiring to systems.



### Easy fuse replacement...

The fuse box is located on the back of the power supply unit.

## Convenient

### Detachable cable...

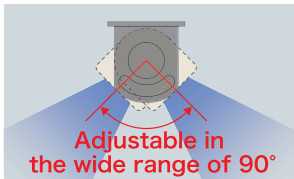
The detachable cable makes it easy to replace only the bar unit even after installation.

### Slim...

Installation footprint is reduced by adopting a high-power supply unit.

### Brackets...

Enabling to finely adjust the installation position.



## SH series primary specifications

Model No.	SH-16/20/30/40/50/60/70
Ionizing method	Pulse AC Corona discharge
Applied voltage	10.5kVp-p
Ion balance	Within $\pm 10$ V
Air supply hose diameter	Hose $\phi$ 6 mm ID $\times$ $\phi$ 4 mm OD
Air supply	Clean dry air or nitrogen (N <sub>2</sub> ) (0.5 MPa on below)
Operating temperature and humidity	5 °C to 55°C, 25 % to 85 %RH (with no dew condensation or freezing)
Operating range	Approx. 50 mm to 2,000 mm (air assist recommended for relatively longer distance)
Ozone production	0.005 ppm or less
Material	Body / Flame-resistant ABS resin + SUS-304 Electrode needle : Tungsten (W,99.99%)
Accessories	High-voltage cable

## SH-G3 specifications

Input power supply	100 to 240 VAC, 50/60Hz
Power consumption	10W
Frequency	30Hz, fixed
Pulse ratio	Positive range40% to 70%, Negative range60%to 30%
AC power cable	2 cables (for 100 VAC and 240 VAC input) 1.8m

## Options

### SH-EC3 Relay Cable (3m)

EDP.No. 632553

### SH-EC5 Relay Cable (5m)

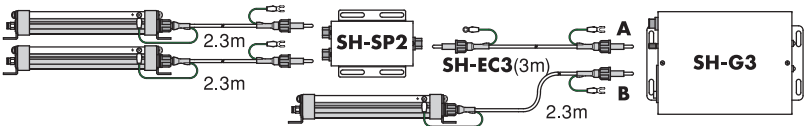
EDP.No. 632554



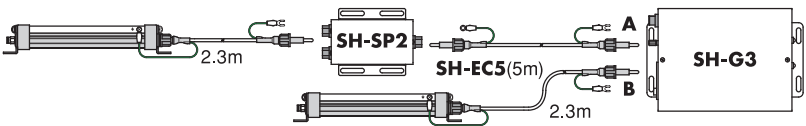
## Wiring examples

Example of branch box and relay cable wiring  
Connecting 2 or 3 pulse ionizing bars to the power supply unit

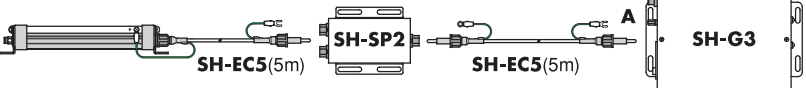
### ●Using an SH-SP2 branch box and SH-EC3 relay cable



### ●Using an SH-SP2 branch box and SH-EC5 relay cable



### ●Using an SH-SP2 branch box and SH-EC5 relay cable



- ※Power supply cable (relay cable) length cannot exceed a total of 10 m to the two high-voltage sockets (A, B).
- ※Up to three SH bars can be connected from a single power supply unit (SH-G3).

## Static erasing performance

	(sec)			(sec)		
	150mm Left	0	150mm Right	150mm Left	0	150mm Right
50 mm	0.1	0.1	0.1	0	0	0
100	0.3	0.2	0.3	0.1	0.0	0.1
300	1.1	0.8	1.4	0.5	0.3	0.5
500	2.4	2.0	3.5	1.1	0.9	1.2
900	4.1	3.8	5.0	2.1	1.6	2.0
1200	7.7	5.7	7.4	2.9	2.2	3.0
1500 mm	9.5	8.2	12.3	6.1	3.8	5.3

Air pressure : 0.1MPa  
Airflow : 92 ℓ / min

Air pressure : 0.3MPa  
Airflow : 257 ℓ / min

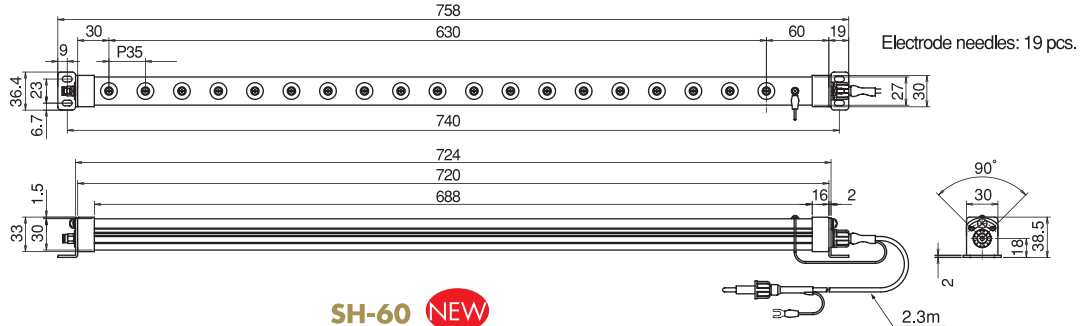
Measured with : SH-40  
CPM : 20pF 150×150mm

## Applications

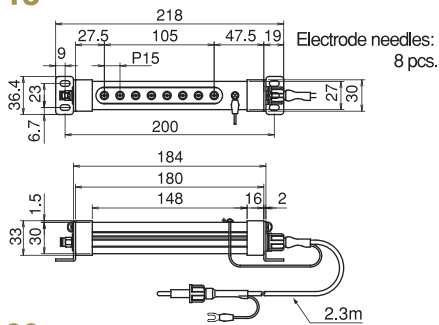


## External dimensions

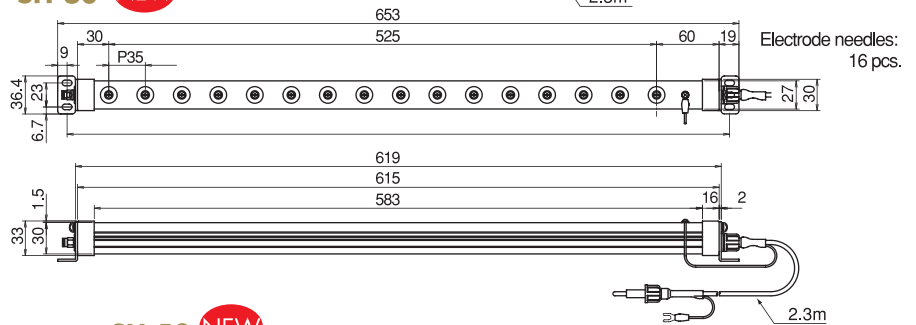
### SH-70 **NEW**



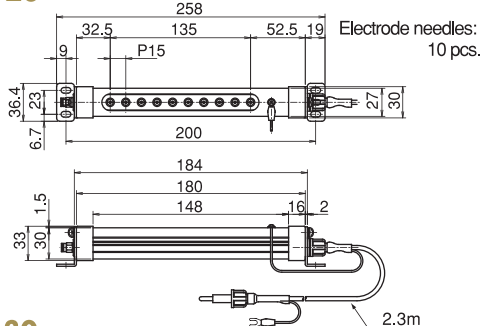
### SH-16



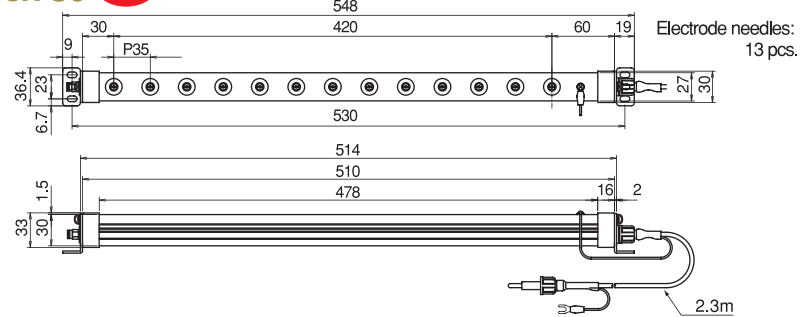
### SH-60 **NEW**



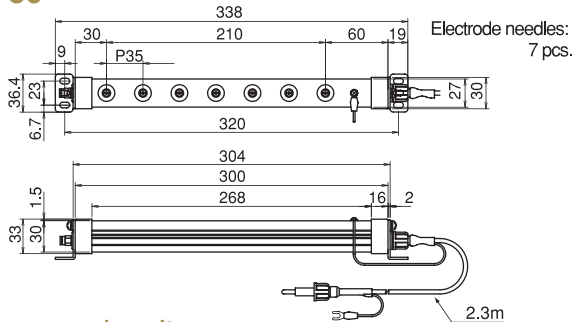
### SH-20



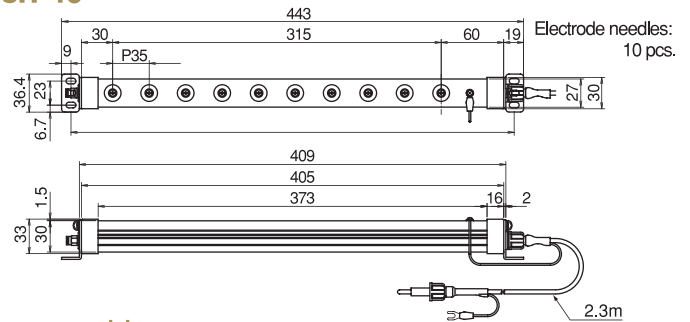
### SH-50 **NEW**



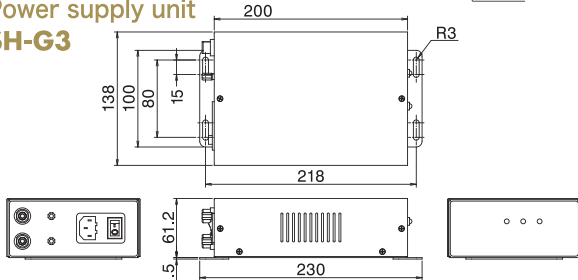
### SH-30



### SH-40



### Power supply unit SH-G3



### AC power cable

For AC100V



For AC240V



●For safety purposes, read this 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 water, oil and solvents, etc., do not come in contact. ●Avoid dew condensation as it can result in electric shock or product damage. ●A high voltage is applied on the needle electrode. Do not put metal objects such as tools or needles, or body parts such as fingers, hands or face near the needle electrode. ●The product specifications, size and other information are subject to change without notice for improvements.

● For improvement, the above specifications, measurements, and prices are subject to change without notice.

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