

EQUIPMENT & TOOLS



Powerless ECO Ionizer

Can you imagine to neutralize the charged insulator with an Ionizer without electric power supply?

ESD programs should include a proper grounding method. Even though all personnel, worktables and floors are properly grounded, there are still some insulators in the manufacturing sites.

It is essential to neutralize insulators to maintain a low percentage of errors because insulators become easily charged when they come into contact with other materials even if those materials are grounded.

Charged insulators retain the charge for extended periods of time as they cannot provide a good pathway for static discharge, which can lead to a major cause of failure in sensitive devices.

Ionizers are one of the most common and effective equipment for eliminating charges on insulators. All corona-type Ionizers require an electric power source to function properly. Our Powerless ECO Ionizer, which is innovative and unique, is an exception. It does not require any electric power source but is operated by air pressure. The operation is just simple. Grip the Ionizer and trigger the handle, and then air will be distributed to the ionizer, and the special generator mounted in the ionizer will automatically be activated by high-pressure air, generating positive and negative ions.

Features

- No need Electric Power Source
- No Battery
- Compact and Handy
- Stable Ion Balance & Quick Decay Time
- Easy Operation and Maintenance
- LED Indicator for high & Low Voltage
- Air Flow Control Knob
- ATEX and CE Certified

Applications

- Electronic Production Assembly
- Printing and Coating Processes
- Plastic Injection and Processing Processes
- Film and Packaging Process
- Painting Process in Automotive Industry



VIDEO



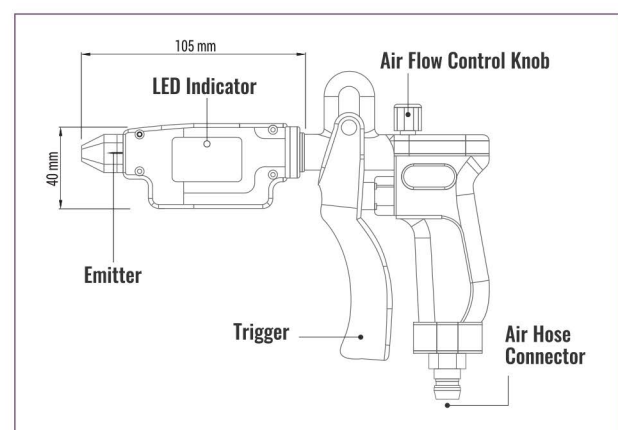
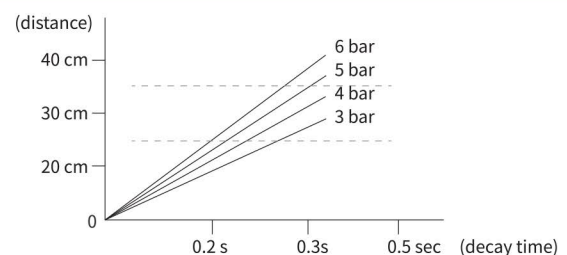
II 3G Ex hpm IIA T6 Gc



ATEX 2014 / 34 / EU
RoHS 2011 / 65 / EU
EMC 2014 / 30 / EU

Item Code	M39E-002
Ion Mode	AC 14 Khz
Decay Time	0.2 sec. (+/- 1,000V to 100V)
Ion Balance	± 10V
Air Pressure	3 ~ 6 Bar
Effective Distance	10 ~ 50 cm
Weight	200 g
Warranty	1 year

Decay Time (±1,000V→±100V)



Ionizing Air Gun

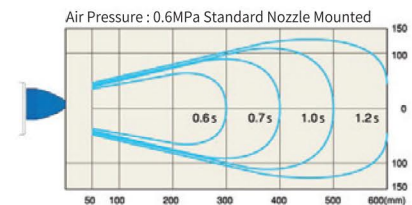
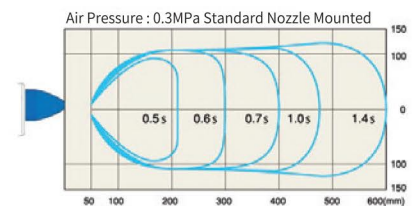
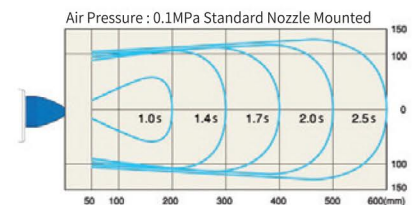
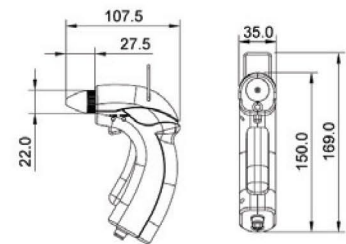
Features

- Ergonomic design
- Particle tracing LED
- Small size & light weight
- Easy connection of tube-fitting (6 mm) to select different air settings
- Strongly built cable (150,000 cable bending test)



Specifications (Air Gun)

Item Code	M01E-009	Remark
Model	SIG-30	
Input Power	DC 24V	± 5%
Power Consumptions	1.8W	Lighting LED
Current Consumption	75 mA	DC 24V
Ion-Generation Method	High Frequency AC	
Air Purge Supply Pressure	0.1 ~ 0.6MPa (0.4 MPa Recommendation)	CDA (Clean Dry Air), N2
Operation Circumstance	5°C ~ +40°C (41°F ~ 104°F, 35% ~ 65%RH)	NO dewing
Ozone (O3) Concentration	≤ 0.05 ppm	50 mm
Operation Distance	50 mm ~ 600 mm	Non-hazardous locations
Decay Time	Please refer to Ionizer performance tables	
Ion Balance	± 10V	0.3MPa, 150 mm
Material (Body)	ABS	
Hook Material	Stainless Steel	
Electrode	Standard	
	Option	
	Tungsten	
	Titanium	
Size	107.5(W)×150(H)×35(D) mm	
Weight	198 g	
Alarm Function	H/V Abnormal	Red LED Alarm
Accessory	AC Adaptor	
Warranty	1 year	



Specifications (Adaptor)

Category	Descriptions	Remark
Rated Input Voltage	AC 100V ~ 240V, 50/60Hz, 0.4A	±5%
Rated Output Voltage	DC 24V 0.75A	
Operation Circumstance	0°C ~ +40°C (32°F ~ 104°F), 5% ~ 95%RH	Where no condensation
Code Length	DC Input Cable: 2.5 m, AC Output Cable: 1.8 m	
Weight	170 g	

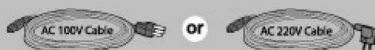
Basic Component



Body
SIG-30
1 ea



Adaptor
SAD-1G-1-001
AC 100~240V, 50/60Hz
DC 24V, 0.75A, 2.5 m/1 ea



Power Cable
SPC-BL-1-001 AC 110V, 50/60Hz, 1.8 m, 1 ea or
SPC-BL-2-001 AC 220V, 50/60Hz, 1.8 m, 1 ea

Additional Component



Discharging Needle
SIE-NZ-1-001



Screw Driver
SDR-NZ-1-001
1 ea

Bench Top Ion Blower

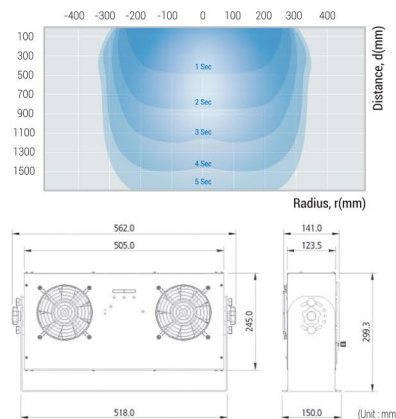
Item Code	M02E-029	M02E-030	M02E-008
Model	SBL-12A	SBL-12B	SBL-15S
Appearance			
Input Power	DC 24V, Adaptor (AC 110 ~ 220V, 50/60Hz)		AC 110 ~ 240V, 50/60Hz, Adaptor DC 24V
Power Consumptions	7.7W	7.3W	35W
Ion-Generation Method	Steady-State DC	Steady-State DC	Steady-State DC
Air Blow Volume	4.25 m ³ /min	4.25 m ³ /min	4.84 m ³ /min
Noise Level (dB)	62dB (1,000 m)		
Ion Balance, 600 mm, Max Air Flow	± 5V (600 mm, maximum air flow)		
Ozone (O3) Concentration	≤ 0.005 ppm		
Operation Circumstance	0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH		
Weight	1.42 kg	1.42 kg	2.8 kg
Material (Body)	EGI	EGI	Aluminum
Electrode	Tungsten (standard) / Titanium (option)		
Mounting Method	Desk Top		
Function	Tip Cleaning, Auto Tip Cleaning		Tip Cleaning, 2 Steps Fan Speed, Ion Balance Display
Alarm Function	Ion Unbalance Alarm, Fan Alarm		Ion Unbalance Alarm
Interface	Remote On/Off, Run State, RS485		Remote On/Off, Run State, RS485, Alarm
Option	RMS (Real Monitoring System)		RMS (Real Monitoring System)
Warranty	1 year		

Item Code	M02E-021	M02E-026	M02E-020	M02E-027
Model	IPI-310A	IPI-310A (Brush)	IPI-310S	IPI-310B
Appearance				
Input Voltage	DC 24V (Adaptor Input voltage AC 75 ~ 275V) max., 6Watts			AC 75 ~ 230V max., 8Watts
Method of Ion Generation	Steady-State DC			
Ion Generation	adjustable	adjustable	Automatic control	Automatic control
Wind Velocity	High: 105 cfm, Low: 58 cfm		High: 48 cfm, Low: 30 cfm	High: 105 cfm, Low: 58 cfm
Ion Balance	± 5V (in 500 mm)	± 5V (in 500 mm)	± 5V (in 300 mm)	± 5V (in 500 mm)
Decay Time	5 sec. (in 600 mm)	3 sec. (in 300 mm)	3 sec. (in 300 mm)	3 sec. (in 300 mm)
Material (Body)	ABS	ABS	SUS	ABS
Electrode	Titanium	Titanium	Titanium	Titanium
Size (mm)	157(W) × 54(D) × 210(H)		157(W) × 88(D) × 210(H)	98(W) × 45(D) × 142(H)
Weight	1.05 kg	1.1 kg	1.5 kg	570 g
Warranty	18 months			

Bench Top Ion Blower

Features

- Ion balance: $\pm 2V$ (at 60 cm distance, max. air flow)
- EMI (Electro-Magnetic Interference) and EMS (Electro-Magnetic Susceptibility)
- Automatic tip cleaning function
- Various Interfaces with automated factories (PLC, Computer)
- Ion unbalance alarm
- RMS (Real Monitoring System)
- Remote control
- Ion bar graph
- Wide range and long distance



SBL-20W / SBL-30W

Item Code	M02E-003	M02E-023
Model	SBL-20W	SBL-30W
Appearance		
Input Power	AC 100 ~ 240V, 50/60Hz	AC 100 ~ 240V, 50/60Hz
Power Consumption	37W	50W
Ion-Generation Method	Steady-State DC	Steady-State DC
Air Blow Volume	8.5 m ³ /min	12.44 m ³ /min
Noise Level (dB)	63 dB (1,000 mm, fan speed max)	68 dB (1,000 mm, fan speed max)
Ion Balance	$\pm 2V$	$\pm 2V$
Ozone (O ₃) Concentration	≤ 0.005 ppm	≤ 0.05 ppm
Operation Circumstance	0°C ~ 50°C (32°F ~ 122°F), 35%~85% RH	0°C ~ 50°C (32°F ~ 122°F), 35%~85% RH
Weight	3.4 kg	6.2 kg
Material (Body)	Aluminum	Aluminum
Electrode	Tungsten / Titanium	Tungsten / Titanium
Mounting Method	Desk Top	Desk Top
Function	4 Step Fan Speed, Tip Cleaning	Remote Control, 4Step Fan Speed, Auto Tip Cleaning, Buzzer On/Off, Ion Balance Display
Alarm Function	Ion Unbalance Alarm, Fan Alarm	Ion Unbalance Alarm, Fan Alarm
Interface	Remote On/Off, Run State, Tip Cleaning, Alarm (Ion Unbalance), RS485	Run State, Remote On/Off, RS485, Alarm (Ion Unbalance)
Option	RMS (Real Monitoring System)	
Warranty	1 year	

Basic Component



Body
SBL-30W
1 ea

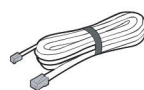


Power Cable
SPC-MT-1-001
AC 100~240V, 50/60Hz
1.8 m / 1 ea



Ground Cable
SGC-XN-1-001
1 m / 60, 40 / 1 ea

Additional Component



UTP Cable (Option)
SUC-MT-1-001
10 m / 1 ea



Remote Controller
SBL-RC2
1 ea

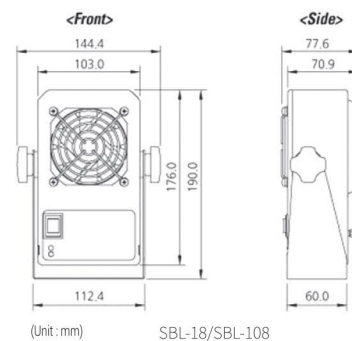
RMS Controller
Single Cable

Power Extension

Bench Top Ion Blower (Mini)

Features

- Ion balance: $\pm 10V$ (SBL-108), $\pm 30V$ (SBL-18) (at 60 cm distance)
- EMI (Electro-Magnetic Interference) and EMS (Electro-Magnetic Susceptibility)
- Various interfaces with automated factories (PLC, Computer)
- RMS (SBL-108, Option)
- Various input voltages (AC110/220, 50/60Hz, DC24V)
- One touch front fan cover off for tip cleaning



Item Code	M02E-004	M02E-005
Model	SBL-18	SBL-108
Appearance		
Input Power	AC 110/220V, 50/60Hz	Adapter (AC 110 ~ 220V, 50/60Hz, DC24V)
Power Consumptions	18W	22W
Ion-Generation Method	DC Type	Steady-State DC
Air Blow Volume	1.9 m ³ /min	
Noise Level (dB)	54 dB	
Ion Balance	$\pm 30V$ (in 600 mm)	$\pm 10V$ (in 600 mm)
Ozone (O ₃) Concentration	≤ 0.005 ppm	
Operation Circumstance	0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH	
Weight	0.8 kg	
Material (Body)	EGI	
Electrode	Tungsten	
Mounting Method	Desk Top	
Function	2 Steps Fan Speed	
Alarm Function	-	Ion Unbalance Alarm
Interface	-	Remote On/Off, Run State, RS485, Power input
Option	-	RMS (Real Monitoring System)
Warranty	1 year	

SBL-18

Basic Component

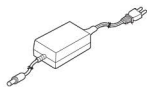


SBL-108

Basic Component



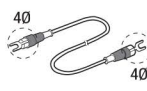
Body
SBL-108
1 ea



Adaptor
SAD-MT-3-001
INPUT : AC 110~220V /
50~60Hz
Output : DC24V
3 m / 1 ea



Power Cable
SPC-MT-1-001
AC 100~240V,
50/60Hz
1.8 m / 1 ea



Ground Cable
SGC-XN-1-001
1 m / 4Ø, 4Ø / 1 ea

Additional Component



UTP Cable (Option)
SUC-MT-2-001
10 m / 1 ea

RMS Controller
Single Cable

Bench Top Ion Blower (Mini)

Features

- By using of AC 50kHz high frequency corona discharge method, this Ionizer is especially effective in neutralizing static electricity at short-range and in maintaining steadfast balance of plus(+) and minus(-) ions.
- Miniature design allows you to install it in the confined space of equipment for LCD, semiconductor, etc., and this compact ionizer can neutralize static electricity from the objects effectively without using compressed air flow.
- A magnetic attached device enables you to install it at any metallic surfaces easily, and unique brackets allow you to bend the head part vertically, elevate up and down, and rotate the face in any desired directions.
- In case of excess high voltage and the abnormality of fan operating, LED light will be on as "RED"
- Easy maintenance thanks to a removable emitter pin unit.

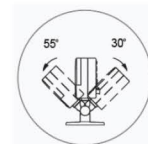
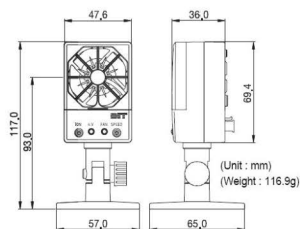
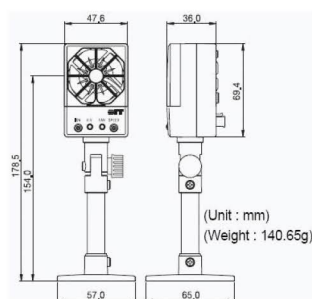


Basic Component

Main unit
Power cable
Ground cable
Instruction manual

Additional Component

AC Adaptor
Optional bracket



Item Code	M02E-025	Remark
Model	SF-40A	
Ion Balance	± 10V	
Ion-Generation Method	High frequency AC	
Electrode	Titanium	
Decay Time	1.5 sec.	150 mm
Input Current	DC 24V, 0.15A	
Air Flow	0.27 m/min (Max)	
Adjustable Controls	Fan speed, Ion Balance	
Size (mm)	46(W) × 68.5(H) × 36(D)	Head
Operation Circumstance	0°C ~ 50°C, 35% ~ 65%RH	
Ozone (O3) Concentration	≤ 0.05 ppm	

Overhead Ion Blower



M03E-006 (SOB-3S)

Features

- Ion balance: $\pm 2V$ (at 60 cm distance, max fan speed)
- EMI/EMS protect
- Automatic Ion Balance System
- Ion unbalance alarm (Buzzer)
- Automatic tip cleaning function
- Various interfaces with automated factories (PLC, computer)
- RMS (Real Monitoring System) – Option
- Remote control (SBL-RC2)
- 2, 3, 4, 5 fans

Item Code	M03E-005	M03E-006	M03E-023	M03E-024
Model	SOB-2S	SOB-3S	SOB-4S	SOB-5S
Input Power	AC 100 ~ 240V, 50/60Hz			
Power Consumptions (Max. Fan Speed)	37W	47W	60W	75W
Ion-Generation Method	Steady-State DC			
Air Blow Volume	8.5 m ³ /min	12.75 m ³ /min	17.00 m ³ /min	21.25 m ³ /min
Noise Level (dB), 1000 mm, High Fan Speed	68 dB			
Ion Balance (at 600 mm, Max Air Flow)	$\pm 2V$			
Ozone (O3) Concentration, at 300 mm	≤ 0.005 ppm			
Operation Circumstance	0°C ~ 50°C (32°F ~ 122°F), 35% ~ 85% RH			
Material (Body)	Aluminum			
Electrode	Tungsten			
Mounting Method	Ceiling or Wall Mount			
Function	Remote Control, 4 Steps Fan Speed, Tip Cleaning, Buzzer On/Off			
Alarm Function	H/V alarm, Fan alarm			
Interface	Run State, Remote On/Off, RS485, Tip Cleaning			
Option	RMS (Real Monitoring System)			
Warranty	1 year			
Weight	3.1 kg	4.1 kg	5.2 kg	6.2 kg
Size (W×L×D) – mm	160×677×184	160×887×184	160×1187×184	160×1487×184

Basic Component



Body
SOB-2S
1 ea



Bracket
SBR-OB-S-001
2 ea

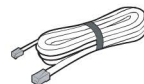


Power Cable
SPC-MT-1-001
AC 100~240V, 50/60Hz
1.8 m / 1 ea



Ground Cable
SGC-XN-1-001
1 m / 6Ø, 4Ø / 1 ea

Additional Component



UTP Cable (Option)
SUC-MT-2-001
10 m / 1 ea



Remote Controller
SRC-OB-1-001
1 ea

RMS Controller
Single Cable

Ion Bar



M07E-025 (SIB1-80A)

Features

- Ion balance: $\pm 50V$ (at 30 cm distance)
- Slim space and mini size
- Easy maintenance
- 5 mark certified (2006)

Item Code	M07E-025
Model	SIB1 Series
Ion-Generation Method	Corona Discharge Pulse AC
Air Purge Supply Pressure	≤ 0.5 MPa (CDA, N2)
Air Purge Connection Port	Pipe Thread 1/8"
Ion Balance	$\pm 50V$ (1,000 mm)
Operating Distance	50 mm ~ 2,000 mm
Operation Circumstance	0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH
Ozone (O3) Concentration	≤ 0.05 ppm
Material (Body)	Non-Flammable ABS (Level V0), Stainless Steel
Electrode	Standard Tungsten
	Option Poly Silicon
Electrode Replacement	Cartridge type
Mounting Method	Bolt Mounting with Bracket
Ion Bar Length	134 mm ~ 2,614 mm
High Voltage Cable	Insulation Cable 4 m (UL3239_20kV - 1007AWG18)
Warranty	1 year

Basic Component

Ion Bar, High Voltage Cable

Additional Component

Middle Bracket

Power Controller

Item Code	M08E-028	M08E-029	M08E-018	Remark
Model	SBP-11	SBP-11N	SBP-06	
Appearance				
Input Power	AC 100 ~ 240V, 50/60Hz			
Power Consumption	23W	23W	16W	
Current Consumption	100 mA	104 mA	72 mA	AC 220V
Output Port	2 port	2 port	1 port	
Material (Body)	EGI	Stainless Steel	EGI	
Weight	2.46 kg	2.48 kg	1.42 kg	
Mounting Method	Bold mounting with bracket			
Adjust Function	Frequency (Hz)	1, 3, 5, 8, 10, 20, 30	-	
	Duty Ratio (%)	40 ~ 60		
Warranty	1 Year			

Ion Bar

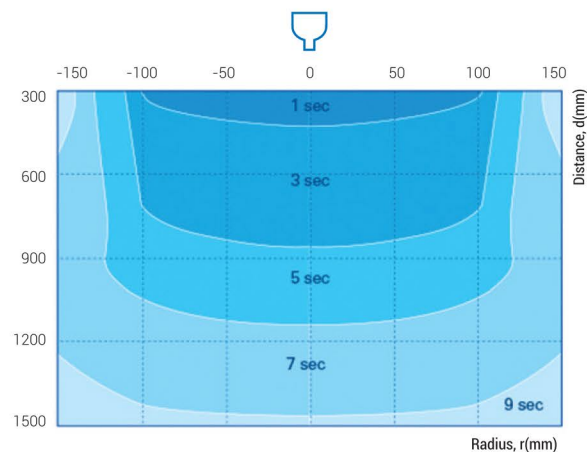


M07E-084
(SIB4-800)

Item Code		M07E-084	Remark
Model		SIB4 Series	
Input Power		DC 24V ($\pm 5\%$)	
Power Consumption		Max. 14.4W	
Current Consumption		Max. 500 mA	DC 24V
Ion-Generation Method		Corona Discharge Pulse AC	CDA (Clean Dry Air), N2
Air Purge Supply Pressure		0.1 ~ 0.5 MPa	
Air Purge Connection Port		Pipe Tap 1/8"	
Ion Balance		$\pm 30V$	1,000 mm
Operating Distance		50 mm ~ 2,000 mm	
Ozone (O3) Concentration		≤ 0.05 ppm	
Operation Circumstance		0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH	
Main Body Material		Non-Flammable ABS (Level V0)	
Electrode Material	Standard	Tungsten	
	Option	Poly Silicon, Titanium	
Emitter Replacement		Cartridge Type	
Mounting Method		Bolt Mounting with Bracket	
Adjust Function	Frequency (Hz)	0.1, 0.3, 1, 3, 5, 8, 10, 20, 30, 50	
	Duty Ratio (%)	40 ~ 70	
	Voltage Level	Positive 1 ~ 10, Negative 1 ~ 10	
	Auto Duty	Mode Set	Distance 50 ~ 1,000 mm
Alarm Function		H/V Abnormal Alarm, Tip Cleaning Alarm	
Interface		Run State, Remote, Interlock, RS485, Alarm (H/V Abnormal, Low Ion, Tip Cleaning)	
Warranty		1 Year	

Features

- Ion balance: $\pm 30V$
- Depending on the polarity, ion generation amount is automatically controlled
- With its slim body, diverse installation is possible
- Tip Cleaning Alarm (internal timer installed
→ possible to set tip cleaning period)
- Output voltage control (8 ~ 12.5kVp-p)



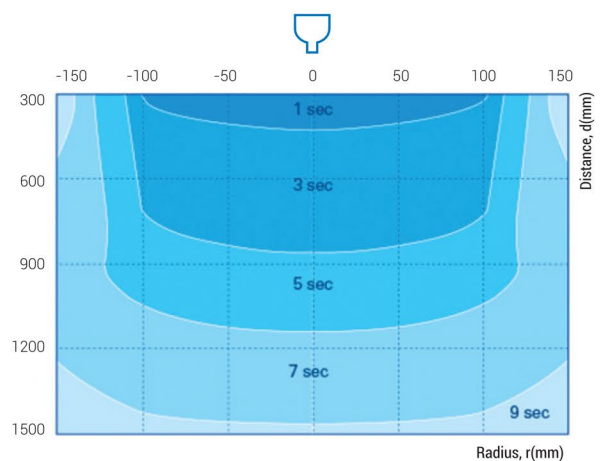
Ion Bar



Item Code		M07E-114	Remark
Model		SIB5S Series	
Input Power		DC 24V ($\pm 5\%$)	
Power Consumption		Max. 12W	
Current Consumption		Max. 500 mA	DC 24V
Ion Generation Method		Corona Discharge Pulse AC	
Air Purge Supply Pressure		0.1 ~ 0.5 Mpa	CDA, N2
Air Purge Connection Port		Pipe thread 1/8"	
Ion Balance		$\pm 30V$	1,000 mm
Ozone (O3) Concentration		≤ 0.05 ppm	
Operation Circumstance		0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH	Level V0
Material (Body)		Non-Flammable ABS	
Electrode	Standard	Tungsten	
	Option	Titanium, Poly Silicon	SIE-4
Electrode Replacement		Cartridge Type	
Mounting Method		Bolt Mounting with Bracket	
Function		Remote Control	
Adjust Function	Frequency (Hz)	1, 3, 5, 8, 10, 20, 30 ~ 100	
	Voltage Level	1 ~ 10	
Alarm Function		H/V Abnormal Alarm, Tip Cleaning Alarm	
Interface		Run State, Remote, RS485, Alarm (H/V Abnormal, Tip Cleaning)	
Operating Distance		50 ~ 2,000 mm	
Option		RMS (real monitoring system), SBP-RD (DC power supply)	
Warranty		1 Year	

Features

- Stable ion balance during long term usage
- Stable performance from high frequency (100hz)
- Able to apply in various conditions with slim appearance and various length
- Increase ion generation by reducing corona discharge loss
- Tip cleaning alarm
(You can set tip cleaning period with timer)



Ion Bar

SIB7 Series is a all-in-one type mini size ion bar. Corona discharge loss is minimized through various specification and digital control system and this product provides high performance and low ion balance. Also, wide range of ionization is possible through an optimum ion generating design.

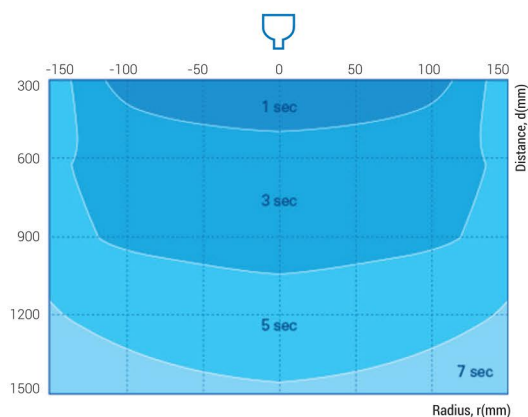


M07E-085 (SIB7-540)

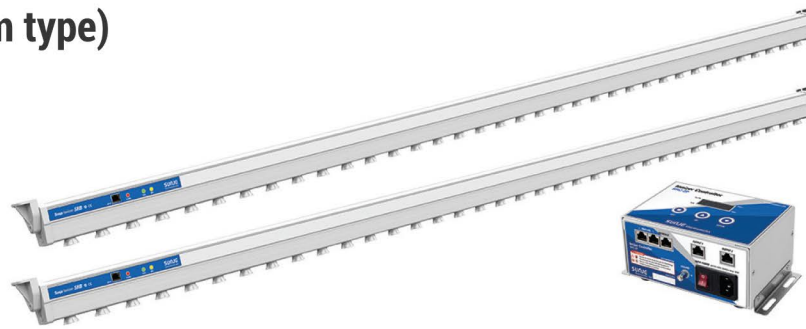
Item Code		M07E-085	Remark
Model		SIB7 Series	
Input Power		DC 24V (± 5%)	
Power Consumption		Max. 7.8W	
Current Consumption		Max. 325 mA	DC 24V
Ion-Generation Method		Corona Discharge Pulse AC	
Air Purge Supply Pressure		0.1MPa ~ 0.5 MPa	CDA (Clean Dry Air), N2
Air Purge Connection Port		Pipe Thread 1/8"	
Ion Balance		± 30V	1,000 mm
Operating Distance		50 mm ~ 2,000 mm	
Operation Circumstance		0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH	
Ozone (O3) Concentration		≤ 0.05 ppm	
Material (Body)		Non-Flammable ABS	Level V0
Electrode	Standard	Tungsten	
	Option	Titanium, Poly Silicon	
Emitter Replacement		Cartridge type	
Mounting Method		Bolt Mounting with Bracket	
Ion Bar Length		422 mm ~ 962 mm	
Adjust Function	Frequency (Hz)	0.1, 0.3, 1, 3, 5, 8, 10, 20, 30, 50	
	Duty Ratio (%)	40 ~ 70	
	Voltage Level	1 ~ 10	
Alarm Function		High Voltage Abnormal Alarm	
Interface		Input: Remote / Output: Run State, Alarm State	
Warranty		1 year	

Features

- Ion balance: ± 30V (in 1,000 mm)
- All-in-one type mini size ion bar (eg. controller internally installed)
- Maximized the ion creation via reducing loss of corona discharging
- Power jumping function among ion bars (Max. 4 ion bar links)
- Aero dynamic design nozzle socket reduces tip contamination
- One-touch in/out socket application
- Design for minimum air consumption



Ion Bar (Room type)

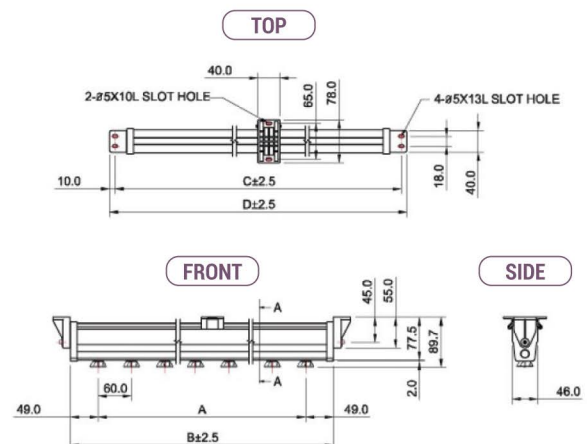


Model	SRB Series / SRC-2P	
Input Power	AC 100 ~ 240V, 50/60Hz	
Power Consumption	Max. 15W	
Current Consumption	Max. 68 mA, AC 220V	
Ion-Generation Method	Corona Discharge Pulse AC	
Material (Body) (Level V0)	SRB Series	Non-Flammable ABS
	SRC-2P	EGI
Electrode	Tungsten	
Emitter Replacement	Cartridge type	
Operation Circumstance	0°C~+50°C (32°F ~ 122°F), 35% ~ 85% RH	
Dimensions	SRB Series	See the accompanying drawing paper
	SRC-2P (with Bracket)	190.0(W)×81.0(H)×122.5(D) mm
Function	Remote Control	
Adjust Function	Period (Sec)	Positive 1 ~ 10 Sec. / Negative 1 ~ 10 Sec.
	Voltage (Sec)	Positive 4 ~ 11 KV / Negative 4 ~ 11 KV
Alarm Function	H/V abnormal	
Interface (RJ45)	Run, Stop, RS-485, Alarm (H/V Abnormal)	
Warranty	1 year	

Features

- Room Ionizer
- Real Monitoring System (RMS) – Option
- Remove static from creating ionic circumstance
- With various products' length, suitable installation for any space

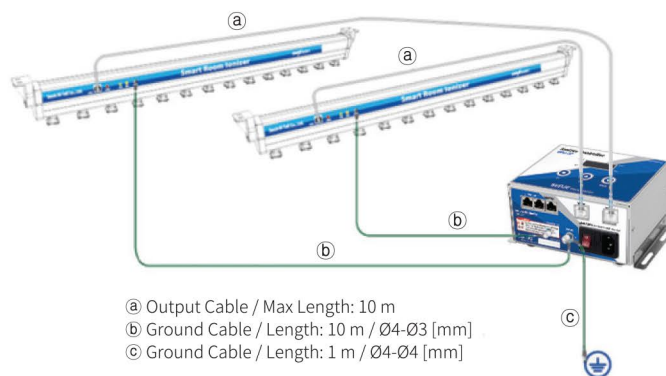
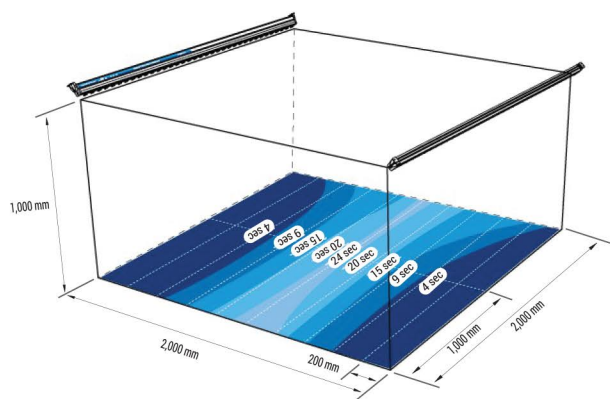
Model	TIP Q'TY	A	B	C	D	MIDDLE BRACKET Q'TY
SRB-1100	18	1020	1118	1160	1180	-
SRB-1200	20	1140	1238	1280	1300	-
SRB-1300	22	1260	1358	1400	1420	-
SRB-1500	24	1380	1478	1520	1540	1
SRB-1600	26	1500	1598	1640	1660	1
SRB-1800	30	1740	1838	1880	1900	1
SRB-2100	36	2100	2198	2240	2260	2
SRB-2200	38	2220	2318	2360	2380	2
SRB-2300	39	2280	2378	2420	2440	2
SRB-2500	43	2520	2618	2660	2680	3
SRB-3000	50	2940	3038	3080	3100	3
SRB-3200	53	3120	3218	3260	3280	3



Decay Time Characteristics

Test Conditions

- Model: SRB-2100
- Output Time: Positive(+) 1 sec., Negative(-) 1 sec.
- Output Voltage: Positive(+) 11kV, Negative(-) 7.5kV
- Decay Time: $\pm 1,000V$ to $\pm 100V$
- Charge Plate capacitance: 20pF(150 × 150 mm), Trek 156A1



Basic Component

Ion Bar (2), Power Controller, Ground Cable (3),
Middle Bracket (0~3), Signal Cable, Output Cable (2), Power Cable

Additional Component

RMS Controller, UTP Cable

Ion Bar (Knife type)

Features

- Possible to use in high temperature environment (130 °C)
- Possible to apply to various working environment
- Small / Slim body → Easy to install in a narrow space
- Various length of ion bar for numerous installing environment
- Tip cleaning device (Option)



Item Code	M07E-000	Remark
Model	SSB1 Ion bar	
Ion-Generation Method	Corona Discharge	
Rated Voltage	Pulsed AC 10kVpp $\pm 7\%$ (Max.) / DC $\pm 9kV \pm 7\%$ (Max.)	AC: SBP-14J4/SBP-06 / DC: SBC-2PN
Structure	Direct-Coupled	
Ion Balance	$\pm 50V$ at pulsed AC	100 mm
Operating Distance	10 mm ~ 250 mm	Non Air
Operation Circumstance	0°C ~ +130°C (32°F ~ 266°F), 35% ~ 85% RH	
Ozone (O3) Concentration	≤ 0.05 ppm	
Material	Main Body	Epoxy, MC Nylon
	Cover	Aluminum
	Electrode	Tungsten (Pitch: 30 mm)
	Cable Insulator	Silicon
Operation Circumstance	0°C ~ + 130°C (32°F ~ 266°F), 35% ~ 85% RH	Non air pressure
Tip Cleaning Cycle	1 Week	
Warranty	1 year	Electrode cleaning

Ion Nozzle

Subminiature Ion Nozzle can reduce contamination of tip by adopting high frequency mode (Piezo: 72kHz). Available for various working environment with different fitting tubes (Option) and angle adjustable bracket, and it brings quick ionization in narrow space. Also, contamination caused by air can be prevented by adjusting Airfilter. (Option)

Features

- Ion balance: $\pm 15V$ (300 mm / Air 0.3MPa)
- Mini size Ion Nozzle
- Infrared ray sensor Ion Nozzle (SPN-12S)
- Easy to set sensor sensitivity and operation time (SPN-12S)
- Ozone-proof material selected: Teflon Nozzle
- Tip cleaning cycle is extended by high frequency AC
- Possible to connect up to 5ea of SPN-12/12S by using Daisy Chain function (6 pole connector)
- Applying a bracket which can adjust angle
- Different Fitting tube is available (Option)



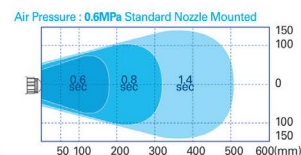
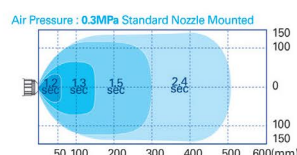
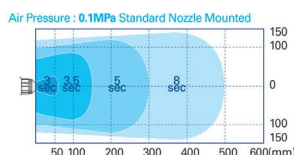
M06E-041 (SPN-12S)



M06E-040 (SPN-12)

Decay Time Characteristics

- Model: SPN-12/12S
- Decay Time: $\pm 1,000V$ to $\pm 1,000V$
- Change Plate Capacitance: 20pF (150 × 150 mm)
- Temperature & Humidity: 24°C, 50%RH



Item Code	M06E-040	M06E-041	Remark
Model	SPN-12	SPN-12S	
Input Power	DC 24V		
Adaptor	Input	AC 100 ~ 240V, 50/60Hz, 1.7A	
	Output	DC 24CV, 2.5A, 60W	
Power Consumption	1.2W	3.6W	
Current Consumption	50 mA	150 mA	AC 220V
Ion-Generation Method	High Frequency AC		Piezo
Air Purge Supply Pressure	0.1MPa ~ 0.6MPa		CDA (Clean Dry Air), N2
Air Inlet	Ø6		
Ion Balance	$\pm 15V$		300 mm
Operation Circumstance	0°C ~ +130°C (32°F ~ 266°F), 35% ~ 85% RH		
Material (Body)	Non-Flammable ABS		
Material (Nozzle)	Teflon		
Electrode	Tungsten		
Mounting Method	Bolt Mounting with Bracket		
Weight	80 g	130 g	
Sensor	-	Photoelectric Sensor	
Alarm Function	High Voltage Abnormal Alarm		
Interface	Alarm (High Voltage Abnormal)		
Warranty	1 year		

Fitting Tubes (SPN-12 / SPN-12S)



Cleanroom Vacuum Cleaner



Item Code	M12E-001	M12E-002	M12E-003	M12E-004
Descriptions	CR-5050N	CR-5050S	CR-5050SM	CR-5040SD
Electric Power	220V / 50 ~ 60Hz (110V is available on request)			
Vacuum Motor	1350W (Dry type motor)			2700W (1350W×2)
Recovery Tank (Liter)	34	44	9	75
Filtering Capacity (%)	99.97 (0.3 μm)	99.99 (0.12 μm)	99.97 (0.3 μm)	95 (0.5 μm)
Bag Filter Capacity (ℓ)	10	10	6	20
Cleanroom Class	Class 100 ~ 1,000	Class 10 ~ 100	Class 100 ~ 1,000	Class 1,000 ~ 10,000
Inside Filter	3 STEPS Paper Polyester HEPA Filter	5 STEPS Paper Polyester IMPACT Filter HEPA Filter ULPA Filter	3 STEPS Paper Polyester HEPA Filter	3 STEPS Paper Polyester HEPA Filter
Dimension (cm)	44×49×70	44×49×95	32×32×46	73×65×123
Net Weight (kg)	14.25	16.55	9.2	35
Gross Weight (kg)	18	20	13	39

Accessories

M12E-001 (CR-5050N) / M12E-003 (CR-5050SM)



- ① Intake
- ② Non-Woven Filter
- ③ Polyester Filter
- ④ Motor
- ⑤ H.E.P.A. Filter



- ① HEPA Filter
- ② Polyester Filter
- ③ Non-Woven Filter
- ④ Filter Basket
- ⑤ Hose Connector
- ⑥ Hose
- ⑦ Curved Connector
- ⑧ Adjustable Wand (S, A/L)
- ⑨ Floor&Carpet Tool
- ⑩ Crevice Tool
- ⑪ Round Brush

Accessories

M12E-002 (CR5050S)



- ① Intake
- ② Non-Woven Filter
- ③ Polyester Filter
- ④ Impact Filter
- ⑤ H.E.P.A. Filter
- ⑥ Motor
- ⑦ U.L.P.A. Filter



- ① ULPA Filter
- ② HEPA Filter
- ③ IMPACT Filter
- ④ Polyester Filter
- ⑤ Non-Woven Filter
- ⑥ Hose Connector
- ⑦ Hose
- ⑧ Curved Connector
- ⑨ Adjustable Wand (S, A/L)
- ⑩ Floor&Carpet Tool
- ⑪ Crevice Tool
- ⑫ Round Brush

Accessories

M12E-004 (CR5040SD)



- ① Filter holder
- ② Polyester Filter
- ③ Paper Filter
- ④ Suction Hose
- ⑤ Curved Handle
- ⑥ Hose Connector
- ⑦ Wand
- ⑧ Floor&Carpet Tool
- ⑨ Crevice tool
- ⑩ Round Brush
- ⑪ HEPA Filter

Item Code	M12E-001	M12E-002	M12E-003	M12E-004
Descriptions	CR-5050N	CR-5050S	CR-5050SM	CR-5040SD
ULPA Filter		○		
HEPA Filter	○	○	○	○
IMPACT Filter		○		
Polyester Filter	○	○	○	○
Paper Filter	○	○	○	○
Hose Connector	○	○	○	○
Hose	○	○	○	○
Curved Connector	○	○	○	○
Adjustable Wand	○	○	○	○
Floor&Carpet Tool	○	○	○	○
Crevice Tool	○	○	○	○
Round Brush	○	○	○	○

ESD Vacuum Cleaner (Backpack type)



Features

- Light weight and super easy to use.
- Padded shoulder and waist straps stabilize the vacuum on the operator's back and hips and permit long, uninterrupted cleaning.
- Snap on top is reversible to allow hose to be moved to either side for right or left handed operation.
- Four-stage filtration system with sealed-air HEPA filter provides superior clean air exhaust.
- Blower adaptor fits into front of unit, converts vacuum into a blower or inflator.
- With blowing function, has blowing accessories

Item Code	M66E-003
Voltage	220 ~ 240V
Power	1400W
Noise Level	≤ 75 dBA
Safety Standard	GS / CE / EMC / ROHS
Cord Length	5 m
Dust Capacity	4.0 L
Color	Black
Surface Resistance	10e5 ~ 10e6 ohm
NW/GW (kg)	4.7 / 6.2
Dimension	490×320×255 mm
Carton Size	560×325×290 mm

ESD Vacuum Cleaner



Item Code	M66E-004
Measurement (mm)	350×350×565
Capacity	35 L
Voltage	120V ~ 230V / 50Hz ~ 60Hz
Power	1250W
Power Cord	5 m
Hose Length	1.5 m
Plastic Inserting Tube Length	480 mm
Vacuum Level	18 Kpa
Noise Level	82 dBA
Surface Resistance	10e5 ~ 10e6 ohm

*HEPA Filter for Cleanroom

Accessories

M66E-004



- | | |
|--------------------------|----------------------|
| ① Handle | ⑫ Blow Connection |
| ② On/Off Switch | ⑬ Wet Brush |
| ③ Top Section | ⑭ Sponge Filter |
| ④ Filter Basket | ⑮ Short Nozzle |
| ⑤ Safety Float Valve | ⑯ Pedestal |
| ⑥ Clasp | ⑰ Clasp Seat |
| ⑦ Container | ⑱ Accessory Holder |
| ⑧ Vacuum Hose Connection | ⑲ Paper Dust Bag |
| ⑨ Rollers | ⑳ Square Round Brush |
| ⑩ Flexible Vacuum Hose | ㉑ Water Drain Screw |
| ⑪ Plastic Tube | ㉒ HEPA Filter |

Nozzle type Vacuum Sealer

Desk top type



Stand type



Features

- Do not need air compressor for an electric type. You can use it after just connecting electric cord.
- Quiet sound in electric type. It is recommendable for a small office, a store, etc.
- Easy to control thanks to a simple digital controller.
- Good durability and strong for corrosion thanks to Stainless steel case.
- Support various mode such as vacuum, sealing, gas and gas flushing.
- Compact size for easy installation.



Features for Digital Controller

- Memory function
- Counting function
- Temperature indicator
- Auto nozzle function
- Key lock to prevent malfunction
- Vacuum and temperature sensor for reliable vacuum packing
- Self-diagnosis function.

Physical property

Item Code	Descriptions		Sealing Size (mm)		Power Consumption (KW)	Vacuum Pump	Air Consumption	Work Capacity (depend on the items)	Dimension (mm)	Net/Gross Weight (kg)
	Width	Length	Width	Length						
M41E-021	10	350			1.5	Electric Motor Pump	N/A	1~6 ea/min	520×500×515	26/38
M41E-022	10	450			1.7				630×530×515	27/40
M41E-036	10	600			2.2				780×530×515	29/43
M41E-023	10	450			1.7	Ejector pump (options: oilless pump, oil pump)	5~7 kg/cm ²	1~10 ea/min	630×530×515	31/46
M41E-024	10	600			2.2				780×530×515	32/49
M41E-025	10	800			3.5				970×530×515	35/55

Chamber type Vacuum Sealer

Single chamber type



Features

- Table and stand models
- Transparent acrylic cover for packing process check-up (option: stainless steel cover)
- Easy operation thanks to a simple digital controller
- Good durability and strong for corrosion thanks to stainless steel case.

Double chamber type



Features

- Higher work capacity with double chambers
- Cover is made of aluminum (option: stainless steel cover)
- Easy operation thanks to a simple digital controller
- Good durability and strong for corrosion thanks to stainless steel case.
- Easy to clean

Item Code	Sealing Size (mm)		Chamber Inner Size (mm)	Chamber Outer Size (mm)	Work Capacity (depend on the items)	Vacuum Pump	Net Weight (kg)	Electricity
	Width	Length						
M41E-026	3.2	415	430×455×160	480×550×430	1~3 times/min	400 L	49	1hp, 220V/60hz (50hz available)
M41E-027	3.2	500	510×620×170	570×723×970		600 L	120	
M41E-028	3.2	600	620×600×170	680×703×970		600 L	130	
M41E-029	3.2	600	620×700×170	680×800×970		800 L	145	
M41E-030	10	910	940×450×155	1000×550×970		600 L	130	
M41E-031	10	750	810×690×170	1700×1000×1050	2~3 times/min	2000 L	330	3ph, 220V/380V 60hz (50hz available)
M41E-032	10	750	950×800×180	1700×1025×1325		3200 L	370	
M41E-033	10	850	950×800×200	1900×1025×1325		5000 L	450	

Automatic Tape Cutter

Item Code	M14E-007	M14E-005 M14E-008 M14E-006	M14E-010	M14E-009	M14E-011
Tape Width	3 ~ 25 mm	6 ~ 60 mm	6 ~ 60 mm	10 mm ~ 80 mm	50 mm ~ 150 mm
Cut Length	15 ~ 70 mm	5 ~ 999 mm	General: 5 ~ 999 mm Fold: 15 ~ 999 mm	10 mm ~ 999 mm	10 mm ~ 999 mm
Power	AC 110/220V, 50/60Hz, 40W	AC 110~230V, 50/60HZ, 25W	AC 110~230V, 50/60HZ, 25W	AC 220V, 50/60Hz	
Size (mm)	126(W)×258(D)×150(H)	115(W)×215(D)×130(H)	116(W)×221(D)×148(H)	190(W)×230(L)×140(H)	265(W)×230(L)×150(H)
Weight	2.2 kg	2.5 kg	2.5 kg	3.5 kg	6.5 kg

Item Code	M14E-007
Model	RT-3700
Features · Semiautomatic type (Press button after using all tapes put on disk) · Only adhesive product can be used · Long life time · Automatic cutting and movable sensor	



Item Code	M14E-005
Model	RT-7000
Features · Fast tape feed and cutting speed. · Self-diagnosis display · Build-in Tweezers, Oil, and Separator · One touch exchangeable knife set · Automatically apply lubricant to the knife edge. · Enable to use 2 Rolls at the same time · Both non-adhesive and adhesive products can be used. · Preset function (Max 6 different tape lengths) · Quantity-count function · Emergency alarm	



Item Code	M14E-008
Model	RT-7700
Features · The same function of RT-7000 · Easy to disassemble and maintain · Programming function	



Item Code	M14E-006
Model	RT-8000
Features · The same function of RT-7000 · Preset function (Max 12 different tape lengths) · Programming function	



Item Code	M14E-010
Model	RT-9000
Features · The same function of RT-7000 · Easy to tear off the tape as the tape end is folded automatically. (option)	



Item Code	M14E-009
Features · Easy to exchange the knife set · Enable to use 2 rolls at the same time · Enable to choose full automatic mode or semi-automatic mode · Enable to use various adhesive and non-adhesive tapes · The allowed width is up to 80 mm	



Item Code	M14E-011
Features · Easy to exchange the knife set · Enable to use 2 rolls at the same time · Enable to choose full automatic mode or semi-automatic mode · Enable to use various adhesive and non-adhesive tapes · The allowed width is up to 150 mm	



Automatic Label Dispenser

Item Code	M60E-001	M60E-002	M60E-003
Available Label Width	15 mm ~ 60 mm	15 mm ~ 120 mm	15 mm ~ 180 mm
Power Consumption	30 W	35 W	40 W
Power Requirement	AC 100 ~ 240V	AC 100 ~ 240V	AC 100 ~ 240V
Size (mm)	103(W)×216(L)×140(H)	163(W)×231(D)×152(H)	223(W)×241(D)×157(H)
Weight	2.1 kg	3.4 kg	4.6 kg

Features

- Auto detection sensor
- Memory function
- Working speed control
- Easy and simple label installation
- Compact size
- Easy and simple removing release paper



Laminating Machine



M70E-001



M70E-002

Features

- Strong roller system: 6 heating rollers + 2 cooling rollers
- Strong motor system: Special DC motor for 5,000hours at maximum of long life
- Maximum 330 mm width and 350 um thickness is able to laminate
- Can laminate up to 4 m per minute
- Actual working time check function

Item Code	M70E-001	M70E-002
Model	SKY325 R6	SKY330 R8
Max. Laminating Width	330 mm (13")	
Max. Laminating Speed	1,400 mm/min	4,000 mm/min
Max. Pouch Thickness	350MIC (14 MIL)	
Max. Laminating Thickness	3 mm	
Heating System	Heating roller internal heater	
Q'ty of Roller	6	10
Carrier	Free	
Temperature Control	Yes	
Speed Control	Yes	
Reverse Switch	Yes	
Preheating Time	5 min.	6 min.
Power Supply	AC 100, 110, 120, 220, 230, 240V (50/60Hz)	
Power Consumption	1,050 watts	1,300 watts
Dimension	545×250×125 mm	653×350×146 mm
Weight	15 kg	29 kg
Operation Temperature	0 – 140	0 – 160

Descriptions



- MEAS: Measures actual roller temp
- STOP: Stop roller
- REV: Reserve action
- HOT: Initial setting to 100℃, speed 6
- COLD: Cold film lamination
- MEMO: Memory function
- SPEED: Variable speed from 1-9

Automatic Shoe Cover Dispenser



Item Code	M67E-001
Shoe Cover Capacity	PE: 200 pcs CPE: 160 pcs Non-woven: 100 pcs
Power Supply	AC220V 50Hz
Machine Size	63(L)×31(W)×101(H) cm
Packing Size	71(L)×37.5(W)×107.5(H) cm/ctn
Net Weight	20 kg/set
Gross Weight	22 kg/set/ctn



Item Code	M67E-002
Shoe Cover Capacity	PE: 100 pcs CPE: 80 pcs Non-woven: 50 pcs
Power Supply	AC220V 50Hz
Machine Size	63(L)×31(W)×75(H) cm
Packing Size	71(L)×37.5(W)×82(H) cm/ctn
Net Weight	20 kg/set
Gross Weight	22 kg/set/ctn



Item Code	M02D-003
Material	Non-woven
Net Weight	4 g/pc
Thickness	0.13 mm
Packing	100 pcs/box, 21 box/ctn, 2100 pcs/ctn
Packing Size	49×80×63 cm(H)/ctn
Gross Weight	15 kg/ctn



Item Code	M02D-004
Material	Non-woven
Net Weight	4 g/pc
Thickness	0.13 mm
Packing	50 pcs/box, 42 box/ctn, 2100 pcs/ctn
Packing Size	49×80×65 cm(H)/ctn
Gross Weight	15 kg/ctn

ESD LED Magnifier



Item Code	M81E-001
Lens Material	Glass
Lens Size	7.5"×6.2"
Diopter	3 Diopter / 5 Diopter
Voltage	100V/ 110 ~ 120V / 220 ~ 240V
Light Source	LED
Standard Mount	Table Clamp
Surface Resistance	10e5 ~ 10e6 ohm
Packing Details	· 4 pcs/carton · Carton Size: 59×52×30 cm · Gross (Net) Weight: 20(18) kg

AIR CLEAN MAT / WATER CLEAN MAT



Are you still using disposable sticky mats?

It is time to think about the environment and being cost-effective at the same time.

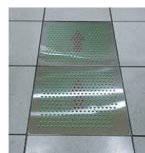
We have two types of reusable and eco-friendly Clean Mats that will draw your immediate attention. The first one is Air Clean Mat, which cleans the bottom of the sole by sucking dust through two step filters. The second one is Water Clean Mat, which washes the bottom of the sole directly with water and moving brushes on the mat. These Mats are one of the most effective ways to remove dust and contaminants from the sole of the shoes, leaving less wastes and particles. Adopting these remarkable mats will also be a cost saving solution in the long term, even if the initial cost can be higher than sticking to the traditional disposal sticky mat.

Air Clean Mat

Features

- Detecting sensor
- Air refreshing function
- Easy installation and maintenance
- 2 step filtration (antibacterial and HEPA filters)
- Access Floor type (M58E-008)
- Heavy traffic (trolley, carts, etc.) type is available
- Air shower room type (M58E-009)
- Customized sizes are available on request

Item Code	Outer Size (mm)	Mat Size (mm)
M58E-001	20T×600×1100	500×1000
M58E-002	20T×600×2100	500×2000
M58E-003	20T×700×800	600×700
M58E-004	20T×800×1100	700×1000
M58E-005	20T×800×2100	700×2000
M58E-006	20T×1100×1100	1000×1000
M58E-007	20T×1100×1500	1000×1400
M58E-008	50T×600×600	600×600
M58E-009	150T×100×1000	100×1000



Access Floor



Entrance



Entrance

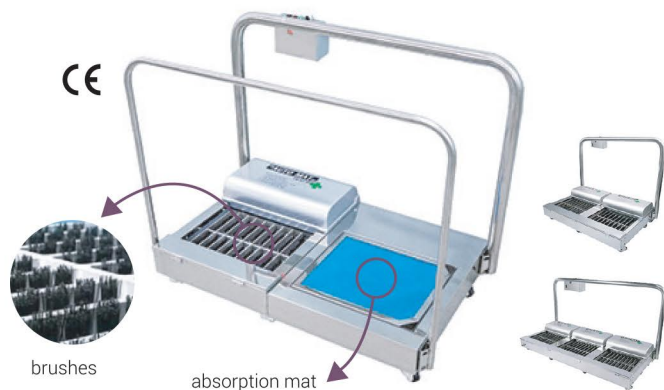


Air Shower Room

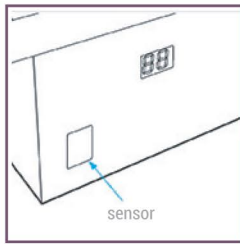
Water Clean Mat

Features

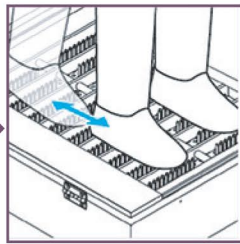
- Detecting sensor
- Clean with water
- Easy relocation with wheels
- Special cleaner (diluent) for heavy dirt, oil, etc. (option)



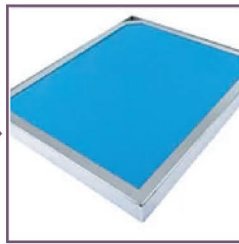
How it works



① Step on the mat, then the sensor on the control box will detect motions automatically and the brushes will start moving.



② Move your feet back and forth 3-4 times.



③ Step on the absorption mat to dry the water out of the soles.



Item Code	M57E-001	M57E-002	M57E-003	M57E-004	M57E-005	M57E-006
Size	730×545	730×1150	780×1110	780×1750	780×1670	780×2270
Outer size						
Absorption Mat		415×495		415×550		415×550
Height (mm)	970	970	970	970	970	970
Weight (kg)	35	70	70	105	98	140
Input Power	AC220V, 50/60HZ					
Power Consumption	40W	40W	80W	80W	120W	120W
Capacity – Washing Tank	10 L	10 L	20 L	20 L	30 L	30 L

Air Particle Counter



Item Code	M72E-001
Test Particle Size	0.3 μm, 2.5 μm, 10.0 μm
Light Source	Semiconductor lasers
Formaldehyde Range	0.5 mg/m ³
Accuracy	± 5% (HT-9601)
Temperature Range (±5%)	0 ~ 50°C / 32 ~ 122°F
Humidity Range (±2%)	0 ~ 100% RH
Display	320×240 mm 2.8in LCD display
Counting Efficiency	100 ±10%@0.5
Sampling	Custom (1s ~ 59 min. 59s)
Sampling Frequency	1 ~ 99 / Continuous
Alarm Levels	1 ~ 100,000 (FED209E Etandard) 2 ~ 9 (ISO 14464-1 Standard)
Test Mode	Single/repeat/continuous/timer/Average
Data Storage	2000
Interface	USB
Operating Environment	5 ~ 45°C, < 90% RH
Storage Environment	-20 ~ 60°C, < 90% RH

ESD CR Chair

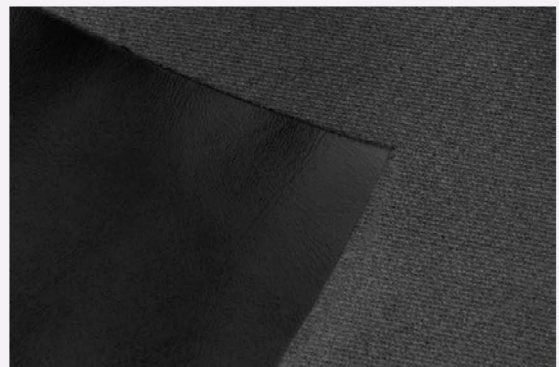
Item Code		M22E-001	M22E-003	M22E-002	M22E-005
Appearance					
Material	Seat	PVC + PU Film	PVC + PU Film	PVC + PU Film	Antistatic PU foam
	Back	PVC + PU Film	-	Conductive PP	Antistatic PU foam
	Body	Aluminum + Metal with hard chrome coating			
	Caster	Metal	Metal	Metal	Metal
Color		Black	Blue or Black	Body: Conductive Black Pad: Blue or Black	Black
Surface Resistance (ohm)		10e6 ~ 10e8	10e6 ~ 10e8	10e6 ~ 10e8	10e8 ~ 10e10
Resistance to Ground (ohm)		10e6 ~ 10e8	10e6 ~ 10e8	10e6 ~ 10e8	< 10e9
Back Seat Size (W×H)		45 cm×40 cm	-	44 cm×55 cm	37 cm×25 cm
Seat Size (W×D)		48 cm×42 cm	48 cm×42 cm	46 cm×42 cm	41.5 cm×40 cm
Height (Bottom to Seat) (Adjustable)		45 cm ~ 58 cm	45 cm ~ 58 cm	50 cm ~ 59 cm	44 cm ~ 60 cm
Filter System		Air Exhausted from sealed cushion is passed through HEPA filter			
Cleanroom Class		1,000 ~ 10,000	1,000 ~ 10,000	100 ~ 1,000	1,000 ~ 10,000

Item Code		M22E-007	M22E-008	M22E-015
Appearance				
Material	Seat	ESD PU leather	ESD PU leather	ESD PU leather
	Back	ESD PU leather	ESD PU leather	ESD PU leather
	Body	Aluminum + Metal with hard chrome coating		
	Caster	Chrome coating to aluminum diecasting		
Color		Blue or Black	Blue or Black	Blue or Black
Surface Resistance (ohm)		10e5 ~ 10e9	10e5 ~ 10e9	10e5 ~ 10e9
Back Seat Size (W × H)		44 cm×50 cm	44 cm×50 cm	40 cm×30 cm
Seat Size (W × D)		45 cm×40 cm	45 cm×40 cm	48 cm×43 cm
Height (Bottom to Seat)		47 cm ~ 61 cm	44 cm ~ 55 cm	44 cm ~ 59 cm
Filter System		-	-	Air Exhausted from sealed cushion
Cleanroom Class		1,000 ~ 10,000	1,000 ~ 10,000	1,000 ~ 10,000

ESD CR Chair

Item Code		M73E-001	M73E-002	M73E-003	M73E-005
Appearance					
Material	Seat	ESD Fabric	ESD Fabric	ESD Fabric	PU Foam
	Backrest	ESD Fabric	ESD Fabric	ESD Fabric	PU Foam
	Support (Backrest)	Chrome Plating metal	Metal with hard chrome coating	Metal with hard chrome coating	Metal with hard chrome coating
	Base	Chrome Plating metal (dia. 300 mm)	Chrome Plating metal (dia. 320 mm)	Aluminum (dia. 320 mm)	Chrome Plating metal
	Caster	Chrome Plating metal	Chrome Plating metal	Chrome Plating metal	Chrome Plating metal
Surface Resistance (ohm)		10e5 ~ 10e8	10e5 ~ 10e8	10e5 ~ 10e8	10e6 ~ 10e9
Seat Size (W × D)		46 cm × 41.5 cm	42 cm × 47 cm	42 cm × 47 cm	40 cm × 44 cm
Backrest (W × D)		38 cm × 33 cm	42 cm × 40 cm	48 cm × 46 cm	40 cm × 30 cm
Features		High quality gas spring Seat Height is adjustable Backrest support is adjustable	High quality gas spring Seat Height is adjustable Backrest support is adjustable	High quality gas spring Seat Height is adjustable Backrest support is adjustable	· No particle issue that occurs in synthetic leather, fabrics, etc. · Polyurethane foam offers great overall durability · Remarkably comfortable due to wider seat and backrest

ESD CR Chair Cover



Item Code	M23E-001	Color	Navy Blue, Black
Size	1.2 mm(T) × 1,370 mm × 40 m	Surface Resistance	< 10e10 ohm

Wrist Strap Tester

Item Code	M10E-003
Test Voltage	Regulated 9 volts, DC
Operating Voltage	6.5 ~ 9 volts
Accuracy	± 5%
Weight	145 g
Dimensions	28 mm(T) × 71 mm(W) × 90 mm(L)

LED Display Indicator

- GOOD (Green): 800 K Ω ~ 10 M Ω
- HIGH (Yellow): 10 M Ω above
- LOW (Red): 800 K Ω below



Solvent Dispenser

Item Code	M32E-001	M32E-002
Capacity	180 ml	
Surface Resistance	10e9 ~ 10e11 ohm	
Shape	Square and octagonal designs	
Material	HDPE (bottle) + Stainless Steel (Mechanical Pump)	



M32E-001



M32E-002

Antistatic Brush

Item Code	M36E-002
Fill Material	Horse Hair
Trim Length	7/16"
Rows	3 × 7
Handle Material	Plywood
Handle Length	7.75"
Handle Width	7/16"
Brush Face Length	1.375"
Brush Face Width	1/4"



Tweezers

Complete lines of precision tweezers for the wide range of microelectronics



M15E-000

