SIMCO ION™
An ITW Company

Ionization Solutions

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Micro Series Ionizer

MODEL 5941 MICRO BLOWER

Simco-Ion's Micro series blowers are designed for advanced critical environment in-tool applications where space is a constraint. The new 5941 Micro blower is compactly designed but exceptionally effective to meet current requirements for advanced automated process tools. Only 110 mm high and 80 mm wide, this amazing compact in-tool blower offers outstanding performance in back-end semiconductor environments.

Model 5941 maintains a ±3V or better balance standard, safeguarded by an exclusive two-level notification feature allowing preventative adjustment time for continuous operations. An internal, automatic balance correction system ensures target devices are ionized accurately, presenting a significant reduction in calibration and maintenance time resulting in cost savings.

Features

- ±3V or better balance
- Compact size
- Cleanliness rated at ISO 14644-1 Class 5
- Facility Monitoring System (FMS) connection
- Auto-clean system

Benefits

- Provides the best corona-based ESD critical environment protection available for maximizing yields
- Exceptional for the limited-space in-tool applications
- Designed for use in an environment with a controlled level of contamination
- Faster response to ionization failure with notification through tool or FMS
- Automates emitter point cleaning reducing maintenance costs and time

Model 5941 Ionizer	
Input Voltage	24 VDC (±10%), 6W max
Discharge[1]	<4 sec @ 1′ (typ), measured in-line from the center of the fan (±1000V-100V)
Balance	±3V or better balance @ 1′ (30 cm) away
Warning Setpoint	+3.5V (±0.5V), -3.5V (±0.5V)
Alarm Setpoint	+5.0V (±0.5V), -5.0V (±0.5V)
Ion Emission	Steady-state DC
Emitters	Tungsten wire emitter points, 4 per blower
Cleanroom Class	Meets ISO 14644-1 Class 5
LED Indicators	NORMAL, green; ALARM, red; WARNING, orange
Airflow	17 cfm
Audible Noise	<36 dBA
Ozone	<0.004 ppm (typ)
Controls	3 position switch (up = hi-fan, center = off, down = low fan) trimpot balance control
Connectors	2.0 mm barrel connector (24 VDC), RJ-9 for FMS
FMS	RJ-9 for fan fault and out of balance alarms
Operating Env.	Temperature: 50-95°F (10-35°C); humidity: 30-70% RH, non-condensing
Enclosure	ABS
Mounting	U-bracket, factory installed
Dimensions	4.33″H x 3.15″W x 1.6″D (110 x 80 x 40.7 mm)
Weight	0.55 lb (0.250 kg)
Warranty	Two year limited warranty
Certifications	CE cULus KC UKCA
Power Adapter 14-21328	
Input Voltage	100-240 VAC 50/60 Hz
Output Voltage	24 VDC, 30W
Dimensions	3.9″L x 1.4″H x 2.1″W (99 x 36 x 52 mm)
Weight	7 oz. (0.2 kg)
Certifications	CE cULus RoHS2

1. Tested in accordance with ANSI/ESD STM3.1-2015.

Ordering Information

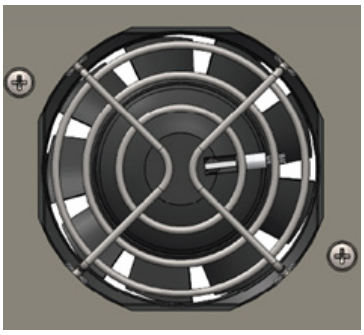
91-5941-01	Model 5941 Micro Blower, NO-SWITCH, Auto-Clean, FMS (includes power adapter, power cord, mounting bracket
91-5941S-01	Model 5941 Micro Blower with SWITCH, Auto-Clean, FMS (includes power adapter, power cord, mounting bracket)
91-5941-NBX01	Model 5941 Micro Blower, NO-SWITCH, Auto-Clean, FMS (does not include power adapter, power cord, mounting bracket)
91-5941S-NBX01	Model 5941 Micro Blower, with SWITCH, Auto-Clean, FMS (does not include power adapter, power cord, mounting bracket)
14-21328	Power Adapter (IEC power cord required)

±3V Balance Performance

Model 5941 Micro blower offers a ±3V superior balance performance. The front grill acts as feedback for internal automatic balance correction, ensuring a ±3V or better balance at all times, regardless of the environmental variables.

Auto-Emitter Point Cleaning

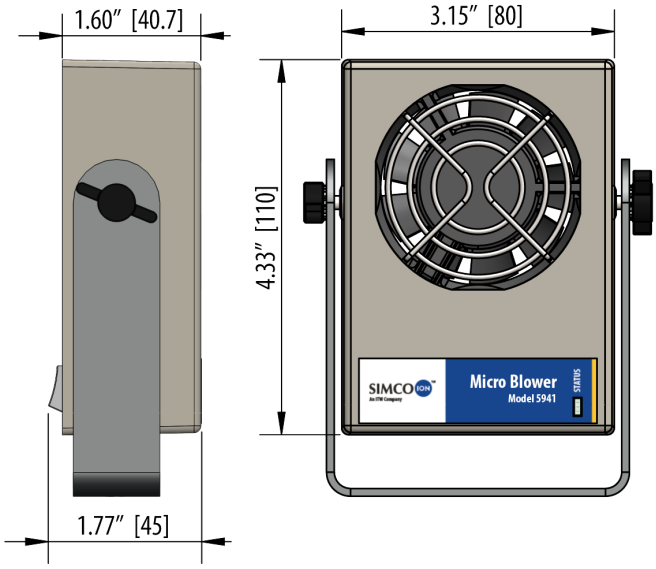
The default 5-day cleaning cycle will activate once the unit is power ON. Particulates typically accumulate on the emitter tip, up to a visible size in 3 to 6 months, depending on the operating environment. The cleaner sweeps through the emitter tips to remove the particulates from accumulating and contaminate the surroundings to protect the target.



Compact Size

The only 110 mm (4.33″) tall and 80 mm (3.15″) wide, the Micro blower's compact size is designed to fit into the latest advanced processing tools where space is limited but still requires superior electrostatic control to perform the process.

Dimensional Drawing



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