In-tool Micro Blower

MODEL 5941

SIMCO ION™
An ITW Company



Simco-Ion's Micro Series Blowers are designed for advanced critical environment in-tool applications where space is a constraint. Model 5941 Micro Blower is compactly designed but exceptionally effective to meet current requirements for advanced automated process tools. Only 4.33" (110 mm) tall and 3.15" (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.

Model 5941, without Power ON/OFF switch, turns on at high fan speed when power is applied to the unit. Model 5941S comes with Power ON/OFF switch for low fan selection at power on.

FEATURES

- ±3V or better balance
- Compact size
- Cleanliness rated at ISO 14644-1 Class 3
- 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 (FMS Simulator is available for checking tools in response to 5941 FMS alarms)
- Automates emitter point cleaning reducing maintenance costs and time

Model 5941	
Input Voltage	24 VDC (±10%), 6W max
Discharge[1]	Without Collimator: <4 sec @ 12" (30.5 cm), typ With Collimator: <3 sec @ 12" (30.5 cm), typ
Balance	±3V or better @ 12" (30.5 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 Technology
Emitter	Tungsten wire, 4 per blower
Cleanroom Class	ISO 14644-1 Class 3
LED Indicator	Green NORMAL; blink Orange/Green BALANCE WARNING; blink Red BALANCE ALARM; blink Alt Green/Red FAN STALL; blink Orange EPC ACTIVE
Control	Trimpot balance control; Model 5941S: 3 position switch (up = hi-fan, center = off, down = low fan)
Airflow	High Fan Speed: 17 cfm Low Fan Speed: 7 cfm (Model 5941S only)
Audible Noise	<36 dBA
Connector	2.0 mm barrel connector (24 VDC), RJ-9 for FMS
FMS	RJ-9 for fan fault and out of balance alarms
Ozone	<0.004 ppm (typ)
Operating Env	50-95°F (10-35°C); 30-60% RH, non-condensing
Mounting	U-bracket, factory-installed
Option	Collimator
Enclosure	ABS
Dimension	Without Collimator: 4.33"H x 3.15"W x 1.60"D (11.0 x 8.00 x 4.06 cm) without bracket With Collimator: 4.33"H x 3.15"W x 2.93"D (11.0 x 8.00 x 7.45 cm) without bracket
Weight	0.70 lb (0.32 kg) without Collimator; 0.72 lb (0.33 kg) with Collimator
Warranty	Two year limited warranty
Certification	CE cULus KC RoHS2 UKCA
Power Adapter 14-21328	
Input Voltage	100-240 VAC 50/60 Hz
Output Voltage	24 VDC, 30W
Dimension	3.9"L x 1.4"H x 2.1"W (9.91 x 3.56 x 5.33 cm)
Weight	0.44 lb (0.20 kg)
Certification	CE cULus KC RoHS2 UKCA

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

Ordering Information

91-5941-yy	Model 5941 Micro Blower, NO-SWITCH, Auto-Clean, FMS
91-5941S-yy	Model 5941 Micro Blower with SWITCH, Auto-Clean, FMS
91-5941-M-yy	Model 5941 Micro Blower with Collimator, NO-SWITCH, Auto-Clean, FMS
91-5941S-M-yy	Model 5941 Micro Blower with Collimator & SWITCH, Auto-Clean, FMS
-yy= 01	Blower includes mounting bracket & power adapter*
-yy= NX01	Blower includes mounting bracket but does not include power adapter
-yy= NBX01	Blower does not include mounting bracket & power adapter
14-21328	24 VDC Power Adapter*
33-5900-01	5900 FMS Simulator
33-5941B-01	Mounting Bracket Kit
33-5905-01	6422e-5941 Cable Converter with 1 ft Power Cable and 1 ft FMS Cable

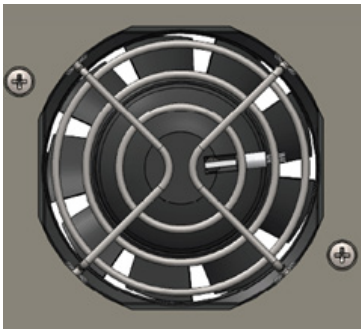
* IEC power cord required, contact Sales Services for detail.

±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.

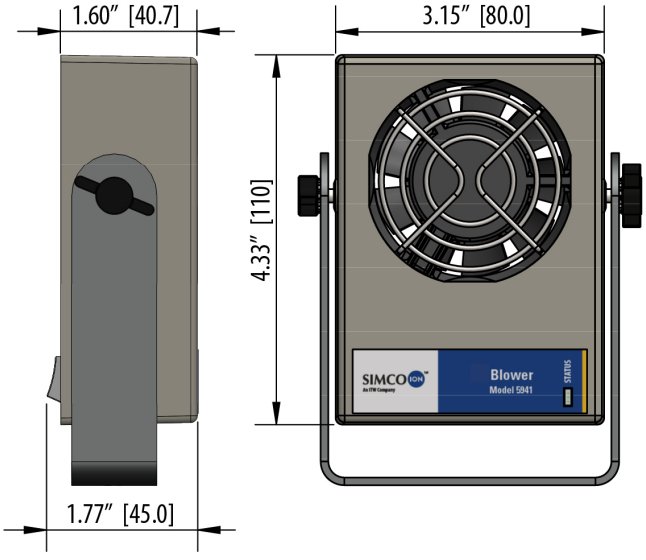




Compact Size

Only 4.33" (110 mm) tall and 3.15" (80 mm) 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 (inch/mm)



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worldwide leaders in **static control**