SIMCO ION™
An ITW Company

Ionization Solutions

WWW.SIMCO-ION.COM

Point-of-Use Ionizing Blower

MODELS 6422e/6422e-AC

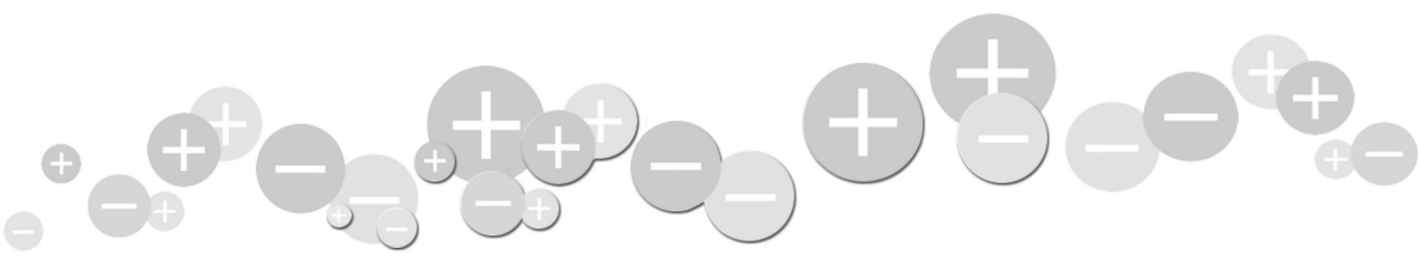
The Simco-Ion Point of Use Ionizing Blower Model 6422e is the most efficient small blower of its kind for controlling static discharge in hard-to-reach areas. In the tight confines of process tools, ionization must be easy and cost-effective but carry the same level of sophistication found in larger ionizers. The Model 6422e features our self-balancing IsoStat® technology and the new fan-stall indication and alarm output feature that notifies the user immediately if the fan has stopped running rather than continue operations without ionization. This new feature, designed in recognition of Industry 4.0 requirements, makes this the most reliable blower of its kind. The Model 6422e meets the challenge of cost and features that your process demands by delivering worry-free ionization.

Features

- IsoStat® technology
- Small form factor available in steady-state DC ion emission blowers
- 24 VDC or 24 VAC input
- Fan-stall indication and alarm output
- Facility Monitoring System (FMS) interface
- Operational failure alarm
- U-bracket mounting

Benefits

- Self-balanced; no calibration needed
- The innovative design offers fast discharge times in confined (point-of-use) areas
- Can connect directly to your process equipment's power source or your wall power
- Immediate notification if the fan stops rather than continue operations without ionization
- Faster response to ionization failure with notification through tool or FMS
- Provides visual notification of any operational failures
- The flush or angled mounting means the blower will reach constrained spaces



Input Voltage	24 VDC (±10%), 6W max or 24 VAC (±10%), 50-60 Hz, 6W max
Output Voltage	5-6 kV at emitter points
Discharge[1]	±1000-100V <4 sec @ 1′ (30 cm) with 24 VAC (<5 sec @ 1′ (30 cm) with 24 VDC)
Balance	±20V @ 1′ (30 cm) away
Ion Emission	Steady-state DC
Emitters	Tungsten wire emitter points; internally shielded
Airflow	23 cfm (typ)
Cleanroom Class	Meets ISO 14644 Class 5 (Fed Std. 209E Class 100)
Operating Temp	Temperature 50-95°F (10-35°C); humidity 20-60% RH, non-condensing
Ozone	<0.004 ppm (typ)
Indicators	Green POWER and red ALARM LEDs
Mounting	U-bracket, factory installed
Dimensions	With bracket: 4.95″H x 4.10″W x 2.48″D (125 x 104 x 63 mm) Without bracket: 4.36″H x 3.26″W x 2.48″D (111 x 83 x 63 mm)
Weight	With bracket 12.7 oz (357g); without bracket 11.2 oz (314g)
Warranty	Two year warranty
Certifications	
Transformer 14-1420-01	
Input Voltage	120 VAC ±10%, 60 Hz
Output Voltage	24 VAC, 60 Hz @ 500 mA, ±5%
Dimensions	3.0″H x 1.9″W x 1.6″D (76.5 x 48.5 x 40 mm)
Weight	0.9 lb (0.4 kg)
Certifications	
Transformer 14-1430-01	
Input Voltage	230 VAC ±10%, 50 Hz
Output Voltage	24 VAC, 50 Hz @ 500 mA, ±5%
Dimensions	3.2″H x 2.2″W x 1.9″D (81.5 x 56.5 x 48.5 mm)
Weight	0.9 lb (0.4 kg)
Certifications	
AC Adapter 14-1322	
Input Voltage	120-240 VAC ±10%, 50/60 Hz
Output	24 VDC @ 400 mA
Dimensions	1.4″H x 2.1″W x 3.4″L (36H x 53W x 86L mm)
Weight	0.25 lb (0.11 kg)
Certifications	

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

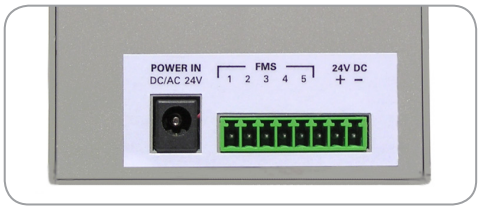
Enhanced Capabilities

An alarm LED on the front of the blower indicates a high voltage circuitry failure and a five-pin facility monitoring system (FMS) interface is accessible on the rear of the blower. The FMS interface provides a 4-20 mA current loop and relay output connection. Together with the 24 VDC input connection, the FMS output is situated on a convenient terminal block, designed for easy integration with your process equipment.

Power Options

The Model 6422e blower may be powered by 24 VAC or 24 VDC, from power supplies or directly from process equipment to fit your application. For 100-120 VAC input power, use #14-1420-01; for 230 VAC, use #14-1430-01; and for applications where DC input power is preferred, use #14-1322 or another 24 VDC source (performance will be reduced using DC power).

Auto-Clean System



The Auto-Clean System features a brush mechanism that sweeps the emitter points when the blower is turned off and on. During operation of the fan, the brush automatically retracts to reduce wear. Simco-Ion recommends activating the Auto-Clean System at least once a week. Cleaning schedules will vary depending on environmental conditions. The Auto-Clean System significantly reduces maintenance time, extends emitter point life and assures balanced performance.

Ordering Information

91-6422e-02	Model 6422e with Alarm Indicator Light and FMS
91-6422e-AC-02	Model 6422e with Auto-Clean
92-6422e-AC-US	Model 6422e with Auto-Clean; 120 VAC to 24 VAC Transformer
14-1420-01	Wall Transformer, 120V/24 VAC 500 mA, 5.5 x 2.1 x 12 mm plug, 6 ft (1.8m) cord, US
14-1430-01	Wall Transformer, 230V/24 VAC 500 mA, 5.5 x 2.1 x 12 mm plug, 6 ft (1.8m) cord, EU
14-1322	24 VDC 120/230V 50/60 Hz AC-DC Adapter
18-20285	Wall Outlet Connector for 14-1322, US/JP
18-20286	Wall Outlet Connector for 14-1322, UK
18-20287	Wall Outlet Connector for 14-1322, EU
18-20288	Wall Outlet Connector for 14-1322, CN

SIMCO ION™
An ITW Company

DS-6422e_V15 - 9/19

Simco-Ion, Technology Group
1141 Harbor Bay Parkway, Suite 201
Alameda 94502
Tel: +1 (800) 367-2452 (in USA)
Tel: +1 (510) 217-0460
ioninfo@simco-ion.com
www.simco-ion.com