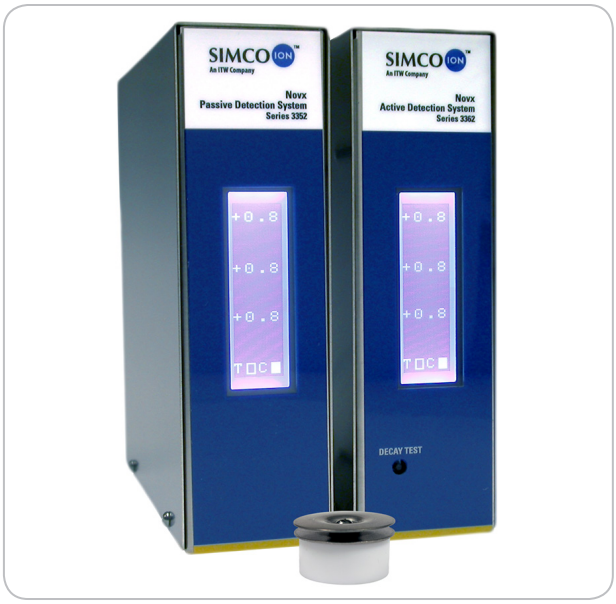

SIMCO ION™
An ITW Company

Ionization Solutions

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Multichannel Voltage Detection

NOVX MODEL 3352/3362 WITH MINIPULSE OPTION

Simco-Ion's Novx brand of Passive (Model 3352) and Active (Model 3362) Multi-fan Closed-loop Ionizer Controllers provide the capability to simultaneously detect, measure, record and monitor electrostatic voltages in multiple locations. The versatile antenna options used with these systems allow their use in a variety of applications including monitoring sensitive workstations, in-tool voltages, or ionizer performance with the option of closed-loop control to select ionizer products. Up to 6 sensors (3 for Ionizer Monitor/Control, 3 for ESD Event Detection) can be connected to an individual instrument. This multi-channel capability provides a cost-effective monitoring solution for multiple areas or ionizers. Data input is actively monitored and logged with time stamps using Calibrator_Reader. The instruments have user-settable thresholds and alarm levels that provide a proactive safeguard for critical areas when interfaced to an alarm output. Out of range conditions can trigger a remote alarm light or audible alarms, shut down a critical process, or make adjustments to an ionizing fan.

Features

- Digital, microprocessor-based controllers, multi-channel, digital/auxiliary I/O, local addressability, RS-485/Modbus or Ethernet data output
- Passive (unpowered) and active antenna configurations
- Precision resolution
- Programmable closed-loop control for up to 3 SSDC ionizer fans or a 3-fan blower
- Programmable alarm set-points with tool shutdown option
- Voltage/polarity displays, local LEDs each channel
- MiniPulse ESD event detection option

Benefits

- Provides easy integration, cost/performance advantages over other monitoring solutions, direct communication to other Novx instruments or a tool controller.
- Monitor voltage at distances and ionizer balance; perform In Situ decay testing without the added expense of a CPM
- Measure and record voltage down to 0.1V
- Enable closed-loop feedback control to select ionizers based on balance or decay test results
- Reduce process variations, decrease scrap/rework and improve process yields
- Visual indicators at the instrument
- Correlation of Electrostatic Charge (ESC) with Electrostatic Discharge (ESD)

	Model 3352	Model 3362
Input Voltage	24 VDC	24 VDC
Capacity	1, 2 or 3 fans	1, 2 or 3 fans
Reporting Range	0 to ±5000V	0 to ±150V
Accuracy	0.5V for <20V; ±5% for >20V	1V for <20V; ±5% for >20V
Audible Alarm Set-points	±0.5V (min)	±1V (min)
LEDs/Channel	Red/green or alarm indicator	Red/green or alarm indicator
Alarm Set-point	Programmable	Programmable
Zero Set-point	Programmable	Programmable
Aux Out	Open collector	Open collector
Output Signals	Digital	Digital
Antenna	Passive/ESD (up to 3 channels)	Active/ESD (up to 3 channels)
Decay Testing	NA	up to 3 channels
Communication	Novx Com RS-485/ Modbus, Ethernet	Novx Com RS-485/ Modbus, Ethernet
Digital Display/Channel	4-Digit	4-Digit
Dimensions	2.0"W x 6.8"D x 6.5"H (5.1 x 17.3 x 16.5 cm)	2.0"W x 6.8"D x 6.5"H (5.1 x 17.3 x 16.5 cm)
Weight	2.1 lb (0.95 kg)	2.2 lb (1 kg)
Enclosure	Stainless Steel	Stainless Steel
Warranty	Two-year limited warranty	Two-year limited warranty
Certifications		
Power Adapter 14-21328		
Input Voltage	100-240 VAC 50/60 Hz	
Output Voltage	24 VDC, 30 W	
Dimensions	3.9"L x 1.4"H x 2.1"W (99 x 36 x 52 mm)	
Weight	5 oz (140 g)	
Certifications		

Ordering Information

91-3352-01	Novx 3352 Passive Multi-fan Closed-loop Ionizer Controller
91-3362-01	Novx 3362 Active Multi-fan Closed-loop Ionizer Controller
91-3352MP-01	Novx 3352 Passive with MiniPulse Multi-fan Closed-loop Ionizer Controller
91-3362MP-01	Novx 3352 Active with MiniPulse Multi-fan Closed-loop Ionizer Controller
32-0220	Mounting Bracket, "L" (2 pcs per controller)
33-0521-5	Passive Antenna, 1.75" x 1" Tall with SMA-to-SMA Cable (5 ft)
33-0504	Passive Antenna, 1.75" x 4" Tall with SMA-to-SMA Cable (5 ft)
33-0510-xx	Passive Antenna, 1"Tall with SMA-to-SMA X ft Cable (xx = 5 or 15)
33-0509-15	Active Antenna Assembly, 5" x 0.5" Tall with 15 ft Triaxial Cable
33-0523-XX	Active Antenna Assembly, 1.75" x 1" Tall with X ft Triaxial Cable (X = 5 or 20)
33-0507-5	Active Antenna Assembly, 1.75" x 4" Tall with 5 ft Triaxial Cable
33-0530-8	Micro ESD Directional Antenna Assembly MPA-02 with Remote Triaxial Cable (8 ft)
14-21328	Power Adapter

Calibration

Instruments are shipped calibrated and certified. Calibration must be validated annually to meet ISO certification compliance requirements.

Applications

The **Novx 3352 Passive Multi-fan Closed-loop Controller** connects with passive antennas to detect low-level voltage change and ion current (≤400V) with sensitivity down to 1V. Antenna connection configurations:

- Monitor voltages on moving targets
- Monitor ionizer balance
- Provide closed-loop control to ionizer fans
- Distinguish the proximity of voltages from steady-state DC ionizer signals
- MiniPulse option for ESD Event Detection

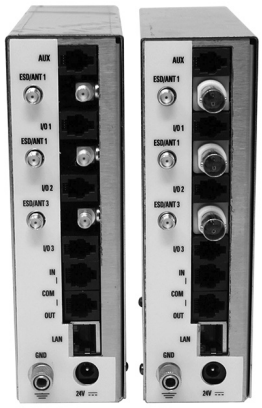
The **Novx 3362 Active Multi-fan Closed-loop Controller** connects to active antennas, providing similar voltage and ion current detection capability as the 3352 with the addition of decay tests. The powered antenna acts as a charged plate monitor (CPM) to periodically measure ionizer discharge times at programmable frequencies. A "Decay Test" button is provided on the front panel of the 3362 for manually initiating an ionizer decay test.

Antenna connection configurations:

- Monitor voltages on moving targets
- Monitor ionizer balance
- Distinguish the proximity of field from steady-state DC ionizer signals
- Perform decay testing automatically or on command
- MiniPulse option for ESD Event Detection

Special Features

Both the Novx 3352 and 3362 feature a front panel which has an LCD screen that displays the voltage and alarm status of each of the three channels in real-time. Each interface with the Novx Calibrator_Reader for a full setup, visual monitoring, and logging capability. Files can be exported for Excel graphing and analysis. These instruments can operate as stand-alone systems and interface to the process controller to initiate response testing and data reporting.



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